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Adventurous Railroading and Rail Hobbies — Founded 1906

VOL. 95, No. 6, APRIL 1974

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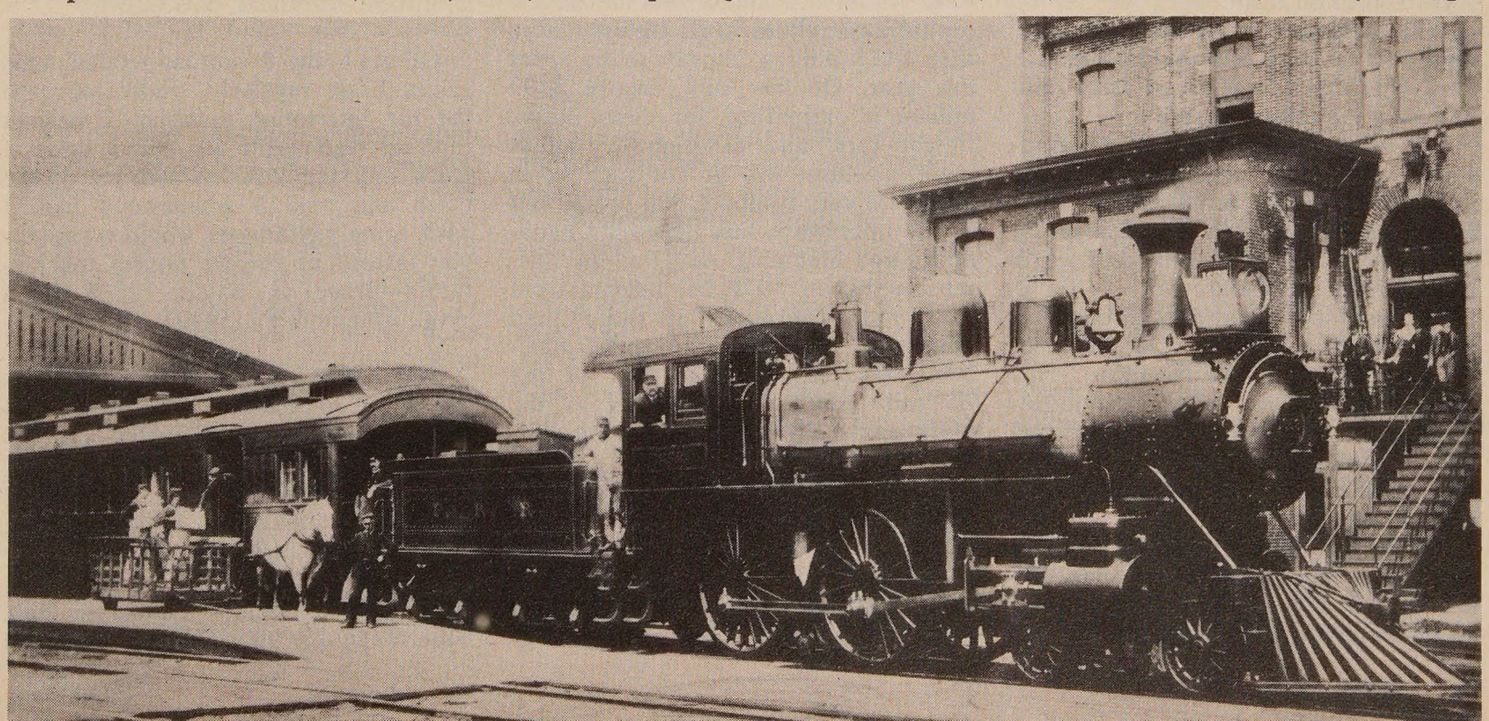
Collection of George B. Ritz (address unknown)

Does any oldtimer recall seeing this ancient type of horse-drawn baggage truck used on a station platform? The engine in our rare photo was PRR 1658 (Altoona, 1873) with a passenger train at Camden, N.J., terminal seventy-seven years ago.



THE MAIL CAR

where editors and readers meet

OUR April cover shows an eastbound train on the Erie Lackawanna main line near Smithboro, N.Y. Its lead unit is a Burlington Northern SD-45 still in Northern Pacific paint, followed by a BN F-45, this being a BN-EL power-pooling arrangement. The photo was made July 3, 1971, by Paul J. Temlpeton, age 36, P.O. Box 111, Mendon, N.Y., with a Topcon Super D camera using a 135mm lens and Ektachrome-X film. Paul is a National Guard civilian technician, was born in Los Angeles, and is a member of NRHS and NARP. Three of his relatives, including a deceased grandfather, worked or are working for the Lehigh Valley. Next month we will have a steam cover. ●

GOVERNOR Milton Shapp of Pennsylvania, who once took his fight against the merger of the N.Y. Central and the Pennsylvania Railroad all the way to the U.S. Supreme Court, thinks the recently-enacted legislation to restructure the Northeast railroads could end in economic disaster, reports *Locomotive Engineer,* the BLE weekly newspaper.

The legislation, which was signed into law by President Nixon on January 2, sets up a public agency which will operate what is left of the six bankrupt carriers after major surgery is performed on them.

What Shapp fears is that the chief result of the law will be to produce wholesale abandonments of track and help only the railroads' creditors.

The legislation provides for a pared-down rail system consisting of some 18,000 miles, with some 30,000 miles being abandoned. It is hoped that the slimmed-down system will produce a profit. Shapp is dubious.

"Abandoning lines may produce a profit," he said, "but it could also cripple the economy of the Northeast. This country is the only one in the industrialized world which is trying to continue its economic development while it is talking about cutting back on its railroad service."

Boston & Maine trustees are taking legal steps to prevent, if possible, the inclusion of their bankrupt road in the gigantic restructured system. So are Penn Central and Jersey Central. It will be interesting to see what finally developes. The Pennsy-New York Central merger was a gargantuan flop. Is there any reason to believe that the Consolidated Rail Corporation will be any better? Or is it merely the first stage of a nationalization of the American railroad industry? ●

FOR MORE than three years now, railway news throughout the nation has been dominated by problems of the bankrupt Northeast carriers. Additionally, the financial conditions of these roads (and a few others elsewhere) have tended to distort the overall rail industry picture, producing a raft of "gloom and doom" reaction. As a result, the public has come to accept the idea that the entire rail industry is dying on the vine with no future when, as a point of fact, 46 of the 64 railways belonging to the Association of American Railroads are operating in the black and 10 of 11 of these might be called relatively prosperous.

Furthermore, a new all-time record in freight service was established last year. Even more significant, perhaps, is the fact that the rail share of the total national ton-mileage package is steadily increasing.—*Burlington Northern News.*

ATSF is doing very nicely, thank you. Its Santa Fe Industries, Inc., topped over one billion dollars in revenue last year, net income $103 million, a substantial rise over 1972. Another successful road, the Soo Line, had a net income of $18,216,000 last year, due largely to expanded carloadings of agricultural products, potash, pulp and paper, and primary metal goods.

Southern Railway is exulting over its 13.1 increase in net income for 1973. This system has authorized the largest capital expenditure in its history, more than $176 million, mostly to be spent this year. Of that sum, nearly $100 million is earmarked for diesel locos, freight cars, and rail-highway equipment. The rest will go for such items as welded rail, computer hardware, and a new microwave link between Chattanooga and Memphis. And Pullman Inc. reports that its 1973 net income from world-wide operations is more than double its 1972 earnings of $17,828,000. Obviously, a large part of the railroad industry is operating in the black, as the *BN News* pointed out.

THE COTTON BELT (St. Louis Southwestern), a Southern Pacific subsidiary, has ordered 1,500 freight cars, costing over $37 million, from Oregon and Washington carbuilders. This is part of SP's overall plan to buy 6,157 new freight cars this year for a total of about $128 million.

CONSTRUCTION of a modern $2.7 million freight-car facility at the Shaffers Crossing shop of the Norfolk & Western in Roanoke, Va., is being started. When completed late in 1975, it will improve the maintenance and utilization of equipment and reduce delays to freight shipments. The present facility being entirely outdoors, is outmoded because bad weather hinders the maximum production of 500 cars weekly. Industries say they will spend $298 million on new plants along the N&W lines as a result of the railroad's industrial development activity last year—a new record for the 14-state system. Aside from that, ITOFCA Inc. recently delivered its 1000th multiple trailer shipment to N&W in Calumet yard, Chicago, from which it was sent to Newark, N.J., over the N&W and Lehigh Valley in a run-through train. ●

READERS' OPINIONS. Don't you think it is time that *Railroad Magazine* pushed the idea of long-haul motor trucks being put on piggyback? Take them off the road, limit trucks to short hauls, and you take a long step toward solving the energy problem.—John B. Allen, 728 S. Locust St., Centralia, Ill. 62801.

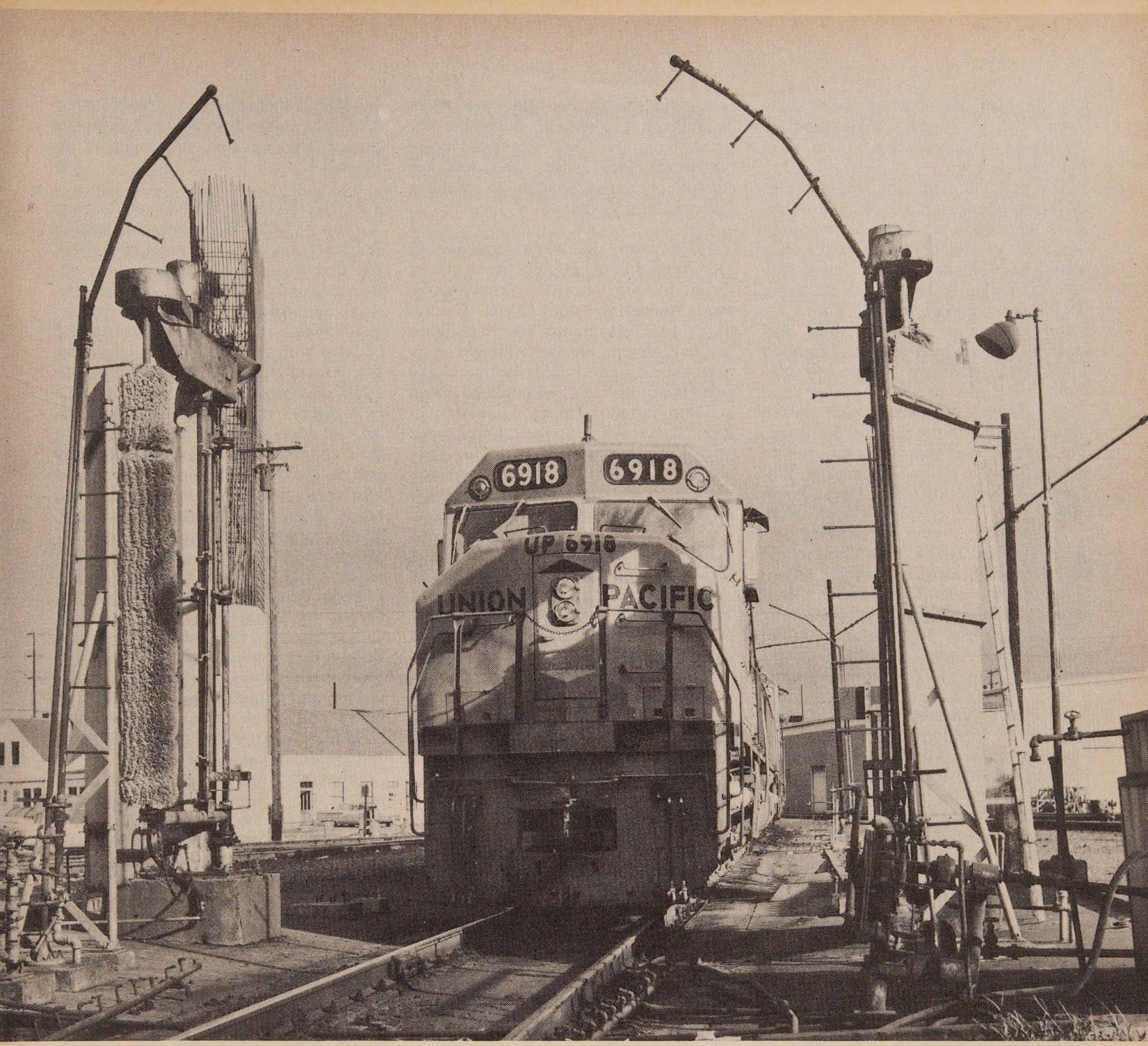
Naturally, I always read *Railroad Magazine* with great interest. It dramatically spotlights the nostalgia of railroading.—Ruben Levin, editor and manager of *Labor,* a bi-weekly newspaper mostly for railroad men, 400 First St., N.W., Washington, D.C.

RAILROAD has a lot of good photos. Keep showing us the combination of trains and gals.—Bob Norris, P.O. Box 2, Little Switzerland, N.C. 28749.

OF ALL the 8 railroad-related magazines I get regularly, yours tops the list for interesting material. I haven't time to read them all; but I drive a truck and take *Railroad* with me on the truck and read it whenever I can. I wish some railfanettes would write for you instead of merely posing for pictures.—Bruce G. Saylor, 2836 Leon Ave., Audubon, Pa. 19407.

THE GIRLS are great, but stop calling them *railfanettes.* The word *railfan* is good for both males and females.—Frank Johnson, Hanover, N.H. *(Ed. note:* Roger Arcara, ex-assistant editor of our magazine, once suggested girls be called *railfannies.)*

PHOTO of Moffat Tunnel in Feb. issue, page 25, shows east portal, not



Two Union Pacific's 6900 class *Centennial* engines (see page 28) await a scrub-down in the Albina yard, Portland, Ore., July, 1970. The *Centennial*, a David E. Neuhart masterpiece, is world's largest and most powerful diesel locomotive.
Photograph by Henry W. Brueckman

west as your caption states.—John Luecke, 710 N.W. 4th Ave., Austin, Minn. ●

PHOTOS in your January issue of Frisco passenger train running in high water bring back memories. I worked on a steamboat in the big flood on the lower Mississippi in 1927, which I remember only too well. Going into St. Louis from the upper river, we found a nine-mile current with a river stage of 33 feet. The flood was almost over the elevated tracks, with water up in the second stories of the buildings along Front Street. Picking up a barge of coal and another of supplies, we kept going. The lower part of the business district in Cape Girardeau was submerged and the railroad depot stood in about six feet of water. New Madrid was flooded from a break in a levee and from there on there was more water than dry land.

Our orders were to proceed to Rosedale, Miss., there the town itself was dry but the river was 94 miles wide! This was because of the high levees and the flat ground behind them. Going downriver, we'd stop and pick up people living on the levees. We took two barges of refugees from another steamboat to Natchez, which had a big refugee camp. In passing Vicksburg, we saw the two big car ferries *Albatross* and *Pelican* tied up. Each had two locomotives on board to keep them out of the water.

When a hydroplane spotted a passenger train stranded in high water, we were ordered to go and take the people off. We found the train, but had to smash our way through brush and treetops to reach it. Coming alongside, we found the engine dead for lack of water. Can you imagine, the whole country flooded and a locomotive out of water? The three coaches were filled with refugees. We wanted to take them off, but the train crew said if we could fill the tender so they could raise steam, they could probably make it on their own. Improvising a way to use the boat's syphons, we filled the tank and

also shoveled over coal so they'd have some extra. As there was no food on the train, our cooks fixed them all a hot meal.

The railroad had sent that train to get those people out and we did everything possible to see it was done. About five miles of rough going and the train would be on higher ground; but if they couldn't make it, they'd back up so we could take everyone off. We pulled up, stood by, and waited for their "All clear" whistle, which we heard over an hour later. Then we fought our way back to the river to look for more refugees. Crews on other boats talked about seeing trains running in water, but I think we were the only one to actually help a train.—Thomas A. Williams, 214 Fourth St., West Point, Iowa. ●

PERSONALITIES. No longer do D&RGW freights stop in Salida, Colo., which since 1880 had been a division point. The trains now rumble by non-stop between Minturn and Pueblo. Most of the crews have been shifted to Pueblo, but one remaining at Salida handles the run to a quarry on Monarch Pass. Remember the late Gilbert A. Lathrop, longtime fireman and brakeman on the Rio Grande? Gil often referred to Salida in the fact articles and fiction stories he wrote for *Railroad Magazine* and in his autobiography which Golden Books West will publish this year in book form.

HETCH HETCHY AND ITS DAM RAILROAD, a Howell-North book reviewed in our Jan. '74 issue, sold out its first printing in nine weeks. Another printing is now on the market. The author is Ted Wurm, one of our *Interesting Railfans,* 122 Monte Vista, Oakland, Calif. 94611. When Ted was in a fairly large Oakland book store the other day, the lady proprietor said: "Your book is our best seller—with one exception, *The Joy of Sex.*"

SINCE he retired seven years ago from the Chessie System, John Marks, 72, of Cincinnati, Ohio, has given much thought to devising switching problems, some of which have appeared in *Chessie News.* John has run and fired virtually every type of steam and diesel locomotive used on the system since 1920. He doubts that "new railroaders" know very much about the intricacies of road and yard switching.

RICHARD J. CARTWRIGHT, Sr., retired president of the Arcade & Attica, died this past January 6th in Arcade, N.Y. (*Interesting Railfan* Bill Kessel used to work for him. A printer's error on page 27 of our Feb. issue said, "All photos on these two pages by William C. Kessel." Substitute the word "from" for "by." Those old steam pix were made before Bill was old enough or smart enough to wield a camera.)

FIVE boys and a girl, ranging in age from 11 to 16, all residents of Tioga in north-central Pennsylvania, were wandering along Penn Central tracks near Hammond, Pa., last January in 7-degree weather. Freight engineer Dale Haney found them, put the kids aboard his train, and radioed ahead to Tioga Junction for an ambulance to meet them. All six were hospitalized briefly for treatment of frostbite. They had set out on an 18-mile hike to Ansonia in near-zero temperature, reports Michael R. Eggleston, Kirkwood, N.Y.

BACK in September, 1901, President McKinley was shot in Buffalo, N.Y. A doctor specializing in police work was sent to Buffalo on a special train with a single coach. The train was so fast and swayed so much that he had to lie in the aisle on a mattress. Its engine was a 4-4-0 Camelback. The doctor got there in good time, but the President died a few days later.—Richard M. Hanschke, 81 Kenwood Circle, Bloomfield, Conn. 06002.

FACT articles are needed urgently by John H. White, editor of *Railroad History,* illustrated bulletin of the Railway & Locomotive Historical Society. "We must have more and better articles," he writes. "Contributors do not have to be members of the R&LHS. Our interests now range well beyond steam locomotives." *Railroad History* has considerable prestige, since it goes to many colleges, technical societies, etc., in addition to individual members; and this prestige is reflected upon its contributors. If you are a good writer and have access to fresh material on any phase of American railroading, or a new angle on old material, Jack White wants to hear from you. The address is R&LHS, Harvard School of Business, Harvard University, Cambridge, Mass.

PASSENGERS boarding a recent Metroliner from New York to Washington, reported Maxine Cheshire in the New York *Daily News,* were asked not to take seats next to a blonde in dark glasses who sat wrapped in white mink, sipping scotch and soda. The woman was Martha Mitchell. She may not have any official status status any more, but is still a VIP to Amtrak. A Nixon administration official who boarded the train in Wilmington, Del., was miffed to be told that the three seats nearest to Mrs. Mitchell could not be occupied. They were reserved as a buffer to protect her privacy, an attendant explained. ●

CONGRATULATIONS to *Railroad* on a "first"! Bill Morgan's photo in February on page 2 must have been the first time you ever showed an entire railroad's equipment in one picture. Seriously, I wonder whether or not Iceland is the only industrialized country with no railroad. That locomotive named *Pioneer,* probably built in 1910, was brought into Iceland in 1913 by a harbor contractor. Some Icelanders had been agitating for a railroad in their country, where transportation was and is limited to coastal lighters and what are known as "pony trains," the roads being insufficient for wagons. The contractor actually built a 2½-mile railroad halfway around the perimeter of the capital, Reykjavik. Its first run on April 10, 1913, was accompanied by band music, gay bunting, and capacity human riders on the little 4-wheel dump cars. For the five years it took his men to build the breakwaters, the railroad served as the island's only public transportation. Passengers rode atop the gravel or clung to the sides of cars.

When the marine project was completed, the contractor abandoned the engine, cars, and trackage. After that, occasional projects to expand the railroad were bandied about, the most serious one being presented in 1927, a suggestion that the line be extended to the southeastern village of Keflavik. But anticipated carloadings could not have offset the huge cost of preparing a roadbed through the lava fields, so that idea died. The original strip of track remained in place until the mid-1930s, until which time the *Pioneer* was fired up now and then and run back and forth to keep the machinery in order. Finally, the Arbaer Museum was established and the little old engine was moved to a spot just outside of it.—Capt. Marshall F. Thayer, USAF, IDF, Box 1, FPO New York 09571. ●

ENJOYED the story of Alco 50000 (Jan. issue). In my high school days I was at the height of my intense preoccupation with the Erie. Whereas my schoolmates spent most of their leisure on athletics, I got my exercise patrolling the Erie's yards. I saw the 50000 when she arrived at Port Jervis (my birthplace) and photographed her at speed in early 1911 when she was still No. 50000, and I shot her several times since, starting in 1931. The lower photo on the first page of that story is mine. I still have the negative, plus some better shots.

The only sour note is the road number on the sketch of an Alco 0-6-6-0 at the end of the story. Those types were Nos. 2600-2602 and remained so during their entire life. So, as No. 3700, the artist was 1100 digits off. Two engineers mentioned by the author, Sam Patterson and Joe Hadlick, were longtime personal friends of mine. The latter's father, who lost an arm in an accident, became the crossing-gate operator at Pike Street crossing. This gate tower can be seen over the tender in a picture of the 2509. Many a happy hour I spent in that tower, a trainwatcher's heaven.—Gerald M. Best, 511 N. Sierra Dr., Beverly Hills, Calif. 90210. ●

A NEW award-winning movie, "Portrait of a Railroad," is now available to managers of motion picture theaters. It's a documentary photographed along much of the Burlington Northern's 25,000 miles of track from the Great Lakes to the Pacific Ocean. Submitted for Academy Award consideration, it was named the best film of the year out of 172 entries at the national conference of the Public Relations Society of America.

A Francis Thompson film crew covered a 19-state area, photographing BN's operations in the Rockies, the great plains, Columbia River Valley, Puget Sound, and the Cascade Mountains. Much of the shooting was done from helicopter, boom truck, aboard fast freights, along the right-of-way, and in busy rail yards. The film's musical score features railroad ballads. Prints may be had from regional booking offices in most key cities. For further info. contact Robert Finehout or Art McLaughin, Association-Sterling Films, 866 Third Ave., New York, N.Y. 10022. This film, if available, could make a big hit at major railfan group meetings and conventions. ●

NEWSCAST. The Lehigh Valley has been authorized by ICC to take over and operate the West Pittston-Exeter Railroad in Luzerne County, Pa. And in New York State the Fonda, Johnstown & Gloversville has become a subsidiary of the Delaware Otsego Corp. of Cooperstown.

PULLMAN-STANDARD introduced its PS-1 boxcar in 1947. In the ensuing 26 years, over 187,000 of these cars have been sold for railroads of North America. And now, Pullman-Standard introduces its new family of general purpose boxcars, with 13 improvements. While all 13 add to overall efficiency and operational capabilities, the main guiding forces to the changes are strength and flexibility.

AN ORDER to manufacture and install power rails for high-speed train testing at the U.S. Department of Transportation center in Pueblo, Colo., has been received by the Rucker Company's Insul-8 Division. To meet the rigid requirements of high-speed power, this division will make the rails of stainless, steel-capped, aluminum extrusions.

THE FIRST complete one-piece cover for open-top hopper cars to be made in the U.S. is fiberglass and is marketed by a serious adult company in Chicago with the juvenile name "Choo Choo Products, Ltd." These new covers let seasonally-idle cars of the type traditionally used to haul coal be put into service carrying grain, chemicals, and minerals susceptible to loss or damage from wind, rain, or snow. Freight cars with such covers can be utilized to a greater extent than previously, thus helping to meet the need for more equipment.

PRESIDENT NIXON is no railfan. He said he wants fleets of buses to have priority in Federal spending and hinted that long-term rapid-rail projects might find financing tight. His viewpoint emerged from his move to ease the energy crises by curbing the use of automobiles. He asked Congress to spend $1.3 billion to upgrade mass transit systems in fiscal 1975. This sum is $500 million more of Federal funds than was spent for such purpose in the current year. He did say, however, in his budget message: "Substantial funding will be available for long-term commuter-rail investments which meet productivity and cost-effectiveness standards."

AUTO-TRAIN CORP., which hauls passengers and their automobiles on the same luxury trains between Washington, D.C., and central Florida, has received the U.S. Food & Drug Administration's award for maintaining a high standard of sanitation not only aboard its trains but also at its terminals and in the special kitchens which provide the trains' food service.

A NEW run-through freight service called *The Whirlwind* and operated by the Santa Fe, Missouri Pacific, and Texas & Pacific between the Southeast and the Pacific Coast began January 28th. It serves the Memphis and New Orleans gateways. ●

PASSENGER car No. 1906, with a history of use on the former Illinois Central train *City of Miami,* is now owned by Bill Richmond, manager of special events for the Illinois Central Gulf in Chicago, and his wife, Pat, who have moved it to tracks of the Monticello & Sangamon Valley Railway Museum in Monticello, Illinois. It was one of six baggage-dormitory cars in what used to be IC's streamlined fleet. Pat actually bought the 1906 herself, as the IC would not sell it to an employe. The couple cleaned, repainted, and refurbished it. They installed in the baggage section a dinette consisting of a train table and two rattan walkover seats from old Chicago El cars, and converted the former bunkroom to a den.

"The entire car, except for the baggage room, will be carpeted," says Bill, "and we may live in it some day."

Another interesting old car, the *Cape Charles,* formerly a Pennsy business

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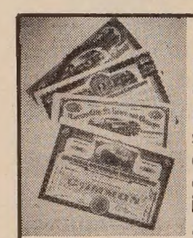

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Amtrak's *Blackhawk*, now operating between Chicago and Dubuque, Iowa, on the ICG's Iowa Div., during public inspection at Galena, Ill., February 13, '74.
Photograph by Paul Cunliffe, Galena, Illinois 61036

car built at Altoona in 1928, has gone to the scrap heap. For nearly 14 years it had been a major tourist attraction at the Carroll Park & Western, situated between Bloomsburg and Berwick, Pa., along Rte. 11. The late Carroll C. Stahl, one of our *Interesting Railfans* (Sept. '66), bought it in 1960 for his CP&W Railroad and frontier town of Deadwood Flats. He planned to restore it, but was kept from doing so by other work on his two-mile tourist lines.

Way Stations, the firm which bought the tourist attraction last year, felt that the once-luxurious car was too far gone for practical renovation. It wasn't sold to a museum because of the expense that would have been involved in building trackage from the short stretch of rails on which it stood to a main-line railroad connection. ●

PHOTO on page 27 of January *Railroad,* although not captioned, undoubtedly shows westbound train 61, a Port Jervis express-local, and the Rutherford, N.J., freight-house (since razed) at the far left. Engine 2509 was standard power on this train, which was scheduled out of Jersey City daily at 2:10 p.m. for some months in the late 1940s. I often rode that train. I believe her engine was scrapped in 1949, after being displaced by 2700 K4B and 2900 K5 types in heavy suburban service as dieselization progressed. It's pathetic how historic locomotives have been destroyed instead of being saved for display. Disagreeing with the author, I think the 2509's Vanderbilt tender made for a better proportion and cleaner lines. That small-capacity tender looks like a chick following a hen.—James E. Davies, 78 Warren Pl., Ridgewood, N.J. 07450. ●

OVERSEAS. A massive plan to develop a high-speed inter-city railway network across the whole of Europe has been approved by the International Union of Railways. By building 3,600 miles of completely new track (including the Channel Tunnel) and substantially modernizing another 8,450 miles, Europe's railway authorities (including British Rail) hope to launch the most ambitious project this century for adapting their services to modern needs and competing with water vehicles and airplanes.

TURKISH army units using flamethrowers to break through giant snowdrifts last winter reached an express train stranded in 22 below zero temperatures for 44 hours with 680 passengers aboard. The rescuers reported that all aboard were alive. "Allah! Allah!" shouted the passengers and rescuers. They embraced, tears flowed and froze on their cheeks.

Changing the subject: Turkey is spending $223 million in 1973-74 in the first phase of a 10-year program to modernize its state-owned railroads, which have been operating at substantially increasing losses since 1959.

TRAIN ROBBER Ronald Arthur Biggs was arrested by Scotland Yard men in Rio de Janeiro this February 2nd, Colin Mackenzie wrote in the *Daily Express* of London, England—caught with his trousers down, the classic end for anyone who dreamed of stealing a million.

Biggs was wearing red bathing briefs in his ninth-floor hotel room preparing for a day on the famous Copacabana beach across the road. A knock at the door spelled the end of a global search by Scotland Yard and the closing of the file on the last and most elusive train robber of them all.

On his break from London's Wandsworth prison in July 1965, Biggs still had 23 years to serve of the 30-year-term he received for his part in the £2,500,000 mail train snatch in 1963. He is now 44.

That night Biggs got his first taste of prison life—in a cell at Rio's Palace of Catette. He was flown back to London on Monday.

SIXTEEN French soldiers on an unauthorized midnight march through a railroad tunnel were run over by a train. Eight were killed, three others seriously injured. The soldiers were walking in single file through the pitch-black, 400-yard tunnel when the train, rounding a curve, smashed into them. There was hardly a foot of clearance between the train and the tunnel wall.

"Even our own employes are not normally allowed to go in there," said an official of the state railway system, adding that 180 trains pass through every day.

The soldiers were on night maneuvers and apparently lost their way back to camp. Led by a sergeant, they decided to take the short cut through the tunnel near Chateau Thierry, scene of an important battle in World War I, about 50 miles northeast of Paris. Special niches are carved in the tunnel wall for railway men to take shelter whenever any repair work is under way. The soldiers, apparently hindered by bulky rucksacks and weapons, were unable to duck into the apertures. ●

The Maple Leaf Dominion

CANADA'S two major rail systems have not run short of fuel in the present energy crunch and, in fact, spokesmen for both Canadian National and Canadian Pacific say they are expecting to maintain adequate supplies indefinitely. CN is considering ways to move western petroleum by rail to the eastern Canadian market, its president, Norman J. MacMillan, told the Commons transport committee. He said the railway officials were aware of the need and were seeking ways of converting

rail equipment to this use. CN doesn't own any oil tank cars but had been depending upon shippers to provide them.

CP Rail has ordered 100 new standard flatcars and 350 single-hitch piggyback flatcars, total cost about $9.3 million, from Marine Industries (Railway Cars) Ltd. in Sorel, Quebec, to serve the nation's growing steel industry, the steel pipe market, and the continued heavy growth in piggyback traffic. Also, it has ordered 140 double-door boxcars for about $3.7 million.

This year CN engineering forces will lay 226 miles of new, heavier rail in Alberta and British Columbia, much of it in quarter-mile lengths of continuous welded rail. In Central Alberta new 100-pound rail will replace 66 miles of trackage on the Brazeau subdivision. Steam fans may recall that this area formerly produced most of the coal used by CN's steam engines in western Canada. Upgrading of the line is necessary to handle the unit trains of sulphur that will begin rolling early in 1975 from a Ram River plant.

According to Elmer McKay, a member of Parliament from Nova Scotia, addressing the House of Commons, both Canadian National and Air Canada have abandoned their basic aim of moving goods and services across the country and are deeply engrossed in "collateral activities" such as real estate. He recommended that the federal money set aside for the proposed Pickering Airport in Montreal and the STOL aircraft experimentation be invested instead in railway improvements, especially modern high-speed trackage to permit trains in regular service to reach speeds of 100 mph.

Keeping Track, the Canadian National bi-monthly publication, with a page size twice that of *Railroad Magazine,* devoted two full pages of its November-December '73 issue to the alcoholic and problem drinkers among railway employes. "We're not out to punish," it announced in big display type; "this isn't a witch hunt." However, it pointed out the dangers to one's health and to personal and public safety as well as the inability to do one's best work caused by even mild cases of alcoholism, and it stressed rehabilitation. Such a feature would never appear in a periodical that derives revenue from liquor ads.

RE-READING Gil Lathrop's story, "Christmas at Cragshead" (Dec. '73), reminds me that train crews aren't the only close-mouth types. Early in the 1930s a couple of guys, Joe and Abe, who delivered groceries in an old Ford for a local merchant, got stuck one day on the Canadian Pacific main line near the Eagle River coal stop. The investigator sent out by CP looked as if he lived on a diet of lemon juice. He questioned Joe, who explained that he and Abe had missed the regular crossing, had stalled their motor, and then tried to get the truck off the track. They heard a drag freight whistle for the crossing, and Abe said: "Let her (meaning the truck) go to hell."

"What happened then?" the investigator asked.

"Well," said Joe, "she went to hell." End of investigation.—Jack Keswick, Box 576, Osoyoos, Canada.

CLIMBING into the caboose of an eastbound Canadian Pacific freight at Glacier, B.C., on August 7, 1946, with a letter authorizing me to ride in engine cabs, I drifted down through the big black hole of Connaught Tunnel. At Beavermouth the agent required me to sign away all responsibility for possible personal injury. There I assembled the crews of both the eastbound and westbound freights, took a picture of them, and joined the ones drifting into Wong Fong's cafe for a hearty meal.

After photographing Pete McDougall, engineer of red-card No. 951, and pusher engineer Leedham of engine 5916, I climbed into the cab of another engine, 5916, and soon we were roaring up the mountain. Leedham answered my hogger's whistle and bunched the slack. From then on it was rocking, rolling, and bouncing, and the busiest time I'd ever had while trying to get a few good shots of that climb to the yawning hole of 208-foot-high Stoney Creek, with the skyscraping peak of Mt. MacDonald far above. So much for that trip. I'd like to know how many of the old mountain "rails" whom I saw and photographed that day are around now and reading this memory-picture?—Ed Pugsley (a British Columbia Electric retiree), 1275 Brantwood Rd., North Vancouver, B.C., Canada.

BEING slim enabled a switchman to save another Canadian Pacific switchman from death or serious injury many years ago. He was one of two switchmen on a yard engine used for unloading and reloading freight cars on barges at Proctor, B.C., beside Kootenay Lake. During an unloading he came very close to losing his life. His survival was due only to quick action by his companion.

The yard goat was coupled to a string of boxcars. As it started pulling them off the barge, both men were on top busily releasing hand brakes. Near the slip apron was a dip where the tracks started their ascent to the freight yard. When boxcars reached that spot

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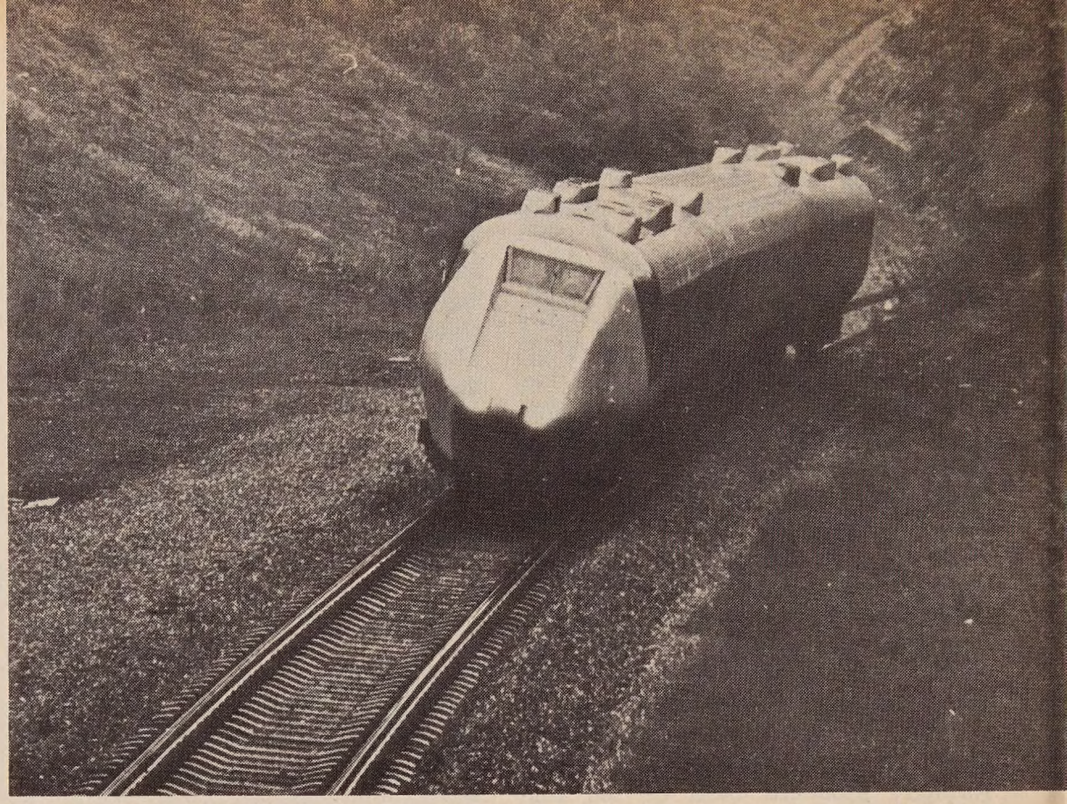
they dipped, forcing the car-top running boards to come very close together.

To make a steep climb, the hogger would widen on the throttle as soon as his engine had cleared that dip. The string of cars was moving at a fast clip when the slim brakie, having finished releasing the last brake, went to swing up onto the car's running board. Somehow, he got between two running boards as the cars hit the dip. With a gap of only a few inches, he was whammed across the stomach so severely that it knocked the breath out of him.

The other switchman, atop the car ahead, rushed over when he witnessed the accident and grabbed his partner before the latter could fall between the fast-moving cars. The hogger also saw what was going on and quickly stopped the string of cars. The injured switchman was taken to a hospital in the caboose of the outgoing freight. Although he suffered much pain, his injuries were little more than bruises. But a long time passed before he fully recovered.—Bert Lanning, 717 Pandora Ave., Victoria, B.C., Canada. ●



British Rail's new *APT-E* hit 125 mph on trial run on test track last October.
British Railways Photograph

125 Miles Per Hour

BRITISH RAIL'S advanced type of passenger train, the APT-E, which started a three-year trial program on Old Dolby test track last August 9th, reached its first goal of 125 mph on October 11th. The cant deficiency it has attained thus far is 8 inches, which corresponds to about 8 degrees of body tilt by APT-E.

Right here, let us explain the meaning of *cant deficiency*. For any one curve and train speed, there is a unique direction through which the resultant of gravitational and centrifugal forces acts. The angle between this resultant and a line drawn normal to the track is known as cant deficiency (or excess). Sometimes, this angle is expressed by the extra amount that the outside rail would need to be lifted to make the resultant and normal coincident (in inches or millimeters).

Old Dalby test track provides many of the features and difficulties you find on a typical main line. It is a 90-mph. standard line with restricting curves which limit any train other than APT to a speed of 80 mph. It has four tunnels and an upward gradient from each end toward the center.

The operational length is 13 miles and the only straight part of the track is 3 miles long, made of jointed rail on wooden ties. The most difficult curve is that at Upper Broughton, which has a radius of a quarter-mile where the track has been canted to 3 inches. For APT-E to achieve high speeds on the following straight line the train has to negotiate this curve at high speed and high cant deficiency.

The active tilt system of APT-E was working throughout the cant-deficiency and high-speed tests. The standard of ride comfort is already well above that experienced on main line stock running on relatively straight track. The electro-hydraulic tilt (or roll) suspension and the self-leveling soft air-spring suspension combine to give a very good ride, especially on the short sample stretches of continuous welded track laid on the Old Dalby line.

APT-E is powered by its British Leyland gas-turbine engines. Eight engines each deliver up to 300 hp for traction. On the test runs so far full power was not required. For instance, on one 125-mph. test only seven engines were operated. Of these only two were run on full power. The experimental engines gave reliable service for the first running trials.

APT-E is a wholly experimental train, with no passenger seats. The two articulated end cars are devoted to power systems and the two trailer cars to experiments of one kind or another. One of the trailer cars is currently in the advanced projects laboratory at the Railway Technical Center being used in structural resonance experiments. The other trailer car, running in APT-E, houses the scientific instruments.

During the next three years APT-E will be put through a wide range of trials. Speeds up to 155 mph. will be attained. Curving and tilt tests will include operating at cant deficiencies of up to 9 degrees. Finally, the detailed analysis of results should provide a very sound foundation for the commercial APTs to follow. ●

Locomotive Messenger

TODAY'S oil shortage recalls a story told to me by a retired Missouri Pacific conductor, Larry Mathis of Fisk, Missouri, who had an energy problem of his own, long ago, and solved it by using his head instead of his feet. In the late 1920s he was working for a construction firm that held a MoPac contract to reduce grades on an Illinois branch line between Chester and Pickneyville. That job required quite a bit of rail equipment, since the dirt taken out of cuts was dumped into fills, and the construction men used steam locomotives as well as steam shovels.

Larry was assigned to work as messenger on an ex-D&RGW steam loco en route from her storage location in Pacific, Missouri, to a spur track at Jamestown, Illinois. As you know, such a messenger had to see that the engine was handled according to instructions and that none of her bearings ran hot. So he stayed with her for a solid week of rides on slow-moving way freights. The MoPac had put out a 20-mph. order on this engine because she was running backward with all side rods in place. At length, on a Saturday morning the end of the trip drew near. Larry and his former Rio Grande tea kettle were in the Pickneyville local that had been made up at Chester.

"What time will you set me out at Jamestown?" he asked Conductor Euge.

"Can't do it today," Euge said.

"Why not?" Larry shot back.

"Jamestown is a spur open on this end. We'd have to drop you in if we set you out there, which is against the rules. So we'll have to take you to Coulter and bring you back Monday evening."

Larry's spirits dropped. He had already spent a lot of time nursing this rusty old scrap heap and now it looked as if he'd put in a week end sitting on her in a dull tank town in southern Illinois. But Larry Mathis was not one to give up easily. Putting his mind to to work, he came up with an answer to his problem.

"Mr. Euge," he said hopefully, "I could put my engine in that spur at Jamestown without dropping her."

"Can't be done," said the conductor.

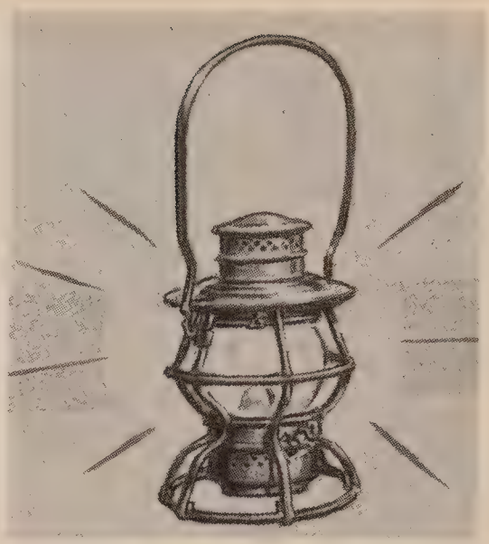
"Yes, it can. Just tell your hogger to stop at Jamestown and have your head shack cut me off. I'll put this baby in the clear for you."

"OK, Larry," said the skipper. "We'll give you a chance to do it, but I still don't believe you can."

Larry mounted his cab as they were leaving Chester. When they got about ten miles from the Jamestown spur, he moved the engine's Johnson bar down into reverse position. Then he opened the throttle and then let the pistons do the rest. Soon the boiler was full of compressed air: 175 pounds, to be exact. More than enough to move the dead engine the distance she had to go. Larry promptly moved the reverse lever back on center, shut off the throttle, and waited.

At Jamestown, the head shack cut Larry's little pet off on the main and bent the iron for the spur. Larry moved his Johnson bar into reverse position, opened the throttle, and the old girl took off under her own power. For good measure, he yanked the cord that whistled a paean of victory.

"Well, I be damned!" muttered the confused Euge as Larry caught the caboose when the local left town. "You did it, kid, but how in hell can I convince the brass collar boys that I didn't drop that engine in at Jamestown?"



"That's your problem, Euge," he chortled. "I solve mine, now you solve yours. I am laying off for the week end as soon as we hit Pickneyville."

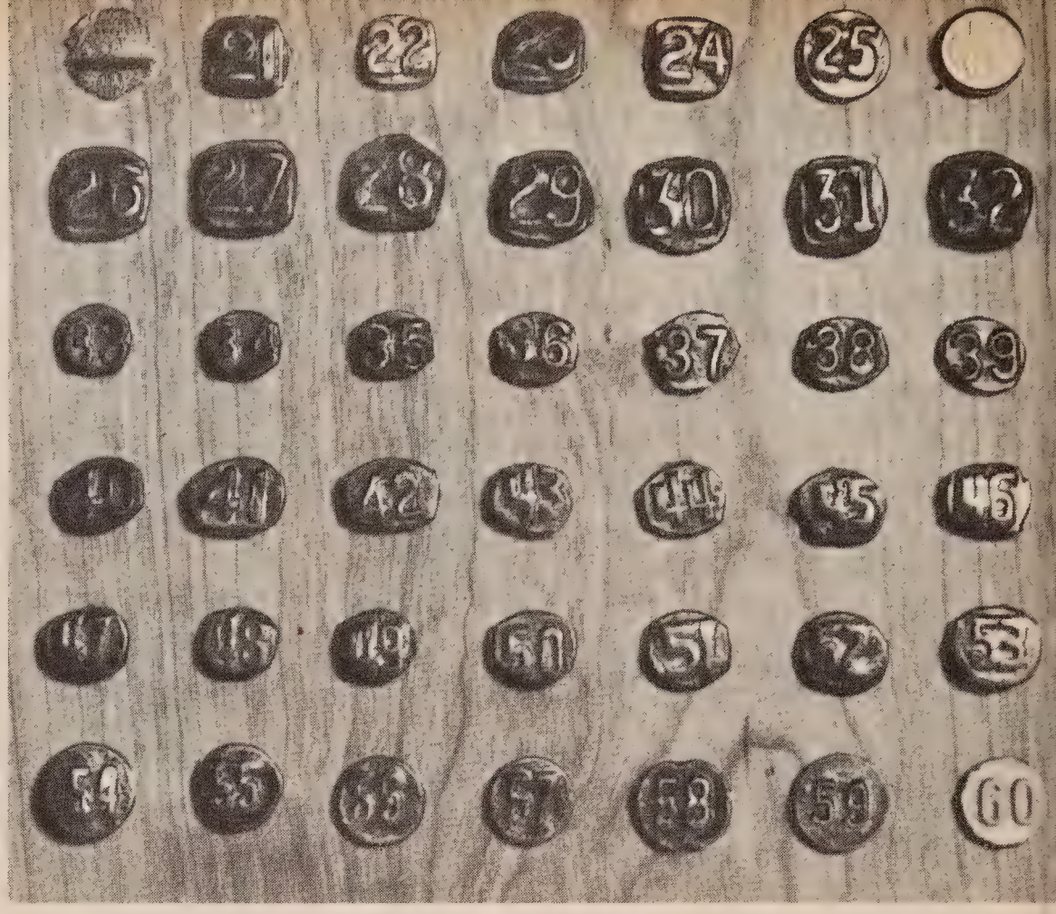
Having had Larry Mathis as my brakeman in the past, I know enough about him to believe his story. Anyway, it was a good way to move a dead engine on her own energy. Maybe some bright guy today can do as well in dealing with the present energy situation.—Bill Church, MoPac conductor, 512 55th Terrace Dr., North Little Rock, Ark. 71228. ●

Paul J. Templeton, P.O. Box 111, Mendon, N.Y. 14506

While two other D&RGW employes watch, the brakeman supervises the coupling of unit 5764 to train 17, the *California Zephyr* at Denver Union station on a very cold Oct. 12, 1969. The *Zephyr* is running late, due to the autumn snowstorm.

HOBBY CLUB

conducted by Sy Reich



Date-nails set owned by E.C. Blankenship, a Norfolk & Western engineer. The set goes back to 1921 and contains 40 different type N&W nails since then.
Norfolk & Western Railway

ONE WAY to stimulate good fellowship among railfan groups, especially during these days of abbreviated gas-buggy trips, was recently arranged by Tom Kapriva of North Star Chapter of NRHS in Minneapolis. Tom set up a joint meeting in the Twin City's area between Northwestern Illinois Chapter of the same organization and his own group. Members and friends of NWI, arriving in Minneapolis aboard Amtrak's *North Coast Hiawatha,* joined North Star for dinner and the meeting. More clubs could take a page out of this fraternal approach for a better understanding of what their hobby is all about.

This thought could be expanded to a joint workshop railfan meeting along the lines of some divisions of Railroad Enthusiasts in the Northeast. Chapters, divisions, branches, or whatever—particularly those situated on passenger-train lines, or even via bus, if necessary—could arrange excellent and very interesting joint meetings. Program and trip chairmen could have unlimited field days planning entertainment. Such comradeship among railfan groups would be well worth the effort.

Cathy Fors advises that her club's cookbook, *First Call to Dinner,* has gone to press, according to North Alabama Railroad Club's newsletter, *White Flags and Full Steam.* The price is $3 postpaid. Not only does the book contain 300 succulent recipes, but also photos by Craig Faulkner and Tom Martz of the club's steam excursions and related activities. The North Alabamans are working hard at various projects to raise enough to restore their steam loco 77. One such project is the cookbook. Contact NARC Cookbook, P.O. Box 4163, Huntsville, Ala. 35802.

One of the newest rail hobbies gathering steam at every flip of the calendar is the date nail collector. What is a date nail? The nails were maintenance markers to determine when it was time to rework or replace a crosstie. For most roads this practice ended in the early 1960s. Besides trackage, the nails were used in pilings, bridges, switches, and telegraph and ordinary street poles. It is estimated that there are over 2200 kinds and types of nails. Many collectors have sets of tie date nails going back for years. Antique dealers tell me that these are valuable relics of a phase of railroading that has all but disappeared.

Some 60,693 revenue fares were carried during 156 operating days last year by New Jersey's Pine Creek R.R., compared to 55,610 in 1972. This is the highest number of fares the railroad operated by the New Jersey Museum of Transportation has ever carried in one year, exceeding their previous best year (1969) by 4,738. In ten years of operation at Allaire, 469,208 paying passengers have ridden this steam tourist line.

A page from an old woodburning loco register of the late 1800s, kept at the Grand Trunk roundhouse at Island Pond, Vt., has the following interesting item: "To turners: Do not remove any more 'bunch wood' from the west end of edging shed. Have the green wood placed in fireboxes as soon as fires are dumped. If wood is required, remove from east end of shed. I wish this matter be given strict attention. Hold engine 679 for repairs and send engine 651 on North Stratford work. F. W. Sadler, Locomotive Foreman." This record is now owned by the Island Pond Historical Society, Inc.

Two more sternwheel steamers owned and operated by the White Pass & Yukon Route have been restored, according to Alaska-Yukon Chapter of NRHS. They are sitting on the banks of the Yukon River in Whitehorse, northern terminus of the WP&Y. Anyone know whether they are to be museum pieces or actively used for tourist trade on the river?

The Moscow, Camden & San Augustine Railroad has donated its ancient wooden combine No. 512 to the Texas State Railroad at Rush, Texas. This state-owned tourist line will begin operations in 1975.—Marvin Sutherland, 5742 Creekebend Dr., Houston, Texas 77035.

The Bartlett, Ill., Historical Society recently unveiled an 1873 marker on the old Bartlett station commemorating a century of Milwaukee Road commuting service to its community, located just west of Chicago.

Pacific Coast Chapter of R&LHS has signed a five-year lease with the San Francisco Public Utilities Commission for the mezzanine floor of the San Francisco cable car barn at Washington and Mason streets. The chapter plans a museum telling the story of the cable cars for the past 100 years, with many artifacts and a concession booth.

Cape Breton Ry. had a very successful season last summer, according to *Canadian Rail,* publication of the Canadian Railway Historical Society. In the 2½-month operation it carried 14,963

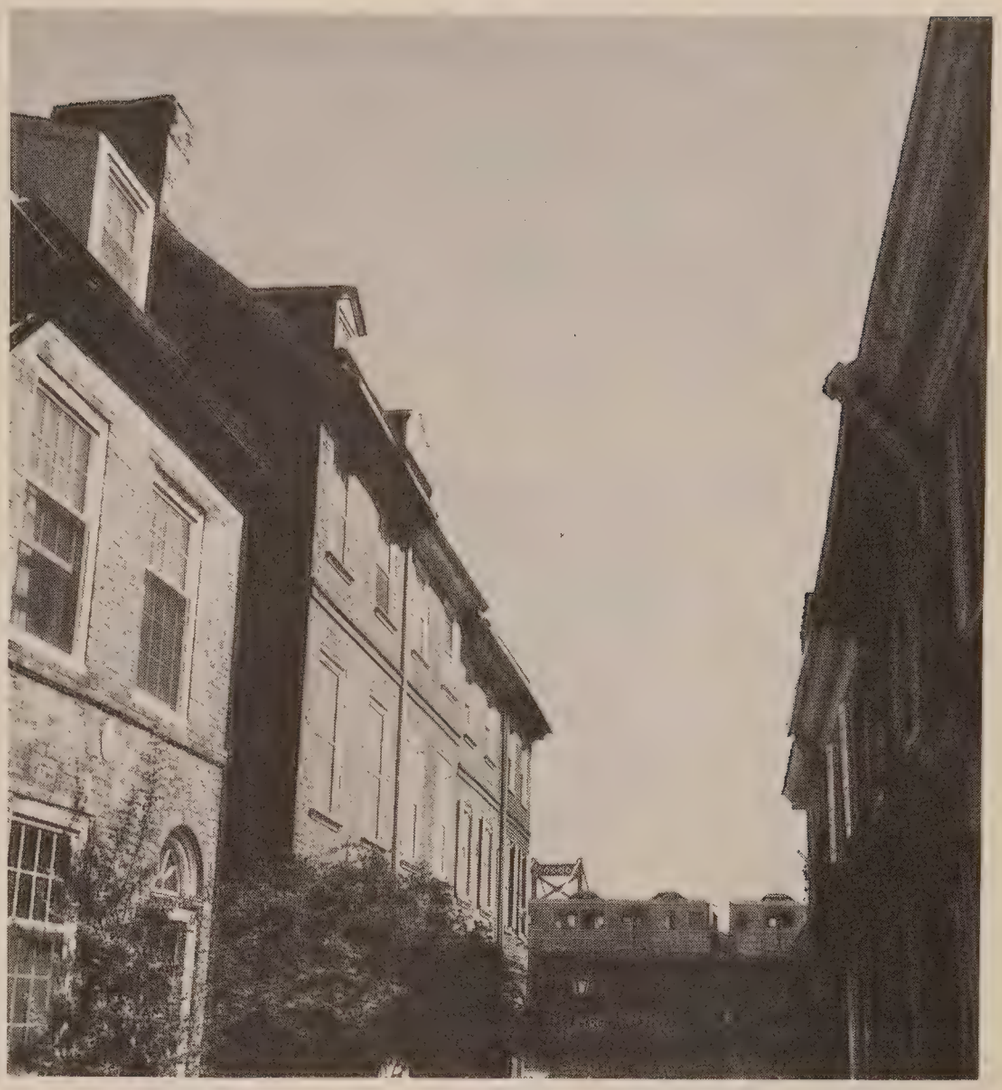
passengers. The Cape Breton Development Corp. is looking for a second steam loco, possibly one of the ex-CPR 1200s at Steamtown USA, and additional passenger cars for a second train running over an alternate route next summer.

The historic business car *Fair Lane* has been retired from Cotton Belt service and donated to the Cherokee Nation Historical Society Museum at Tsa-La-Gi near Tallequah, Okla. Built by Pullman for Henry Ford in 1921, the 82-foot car served, in its time, Ford himself and St. Louis Southwestern Railway as a rolling business office with Pullman comforts. The name *Fair Lane* is also that of Ford's estate in Michigan. The Cotton Belt bought this car in 1942. Of steel construction and weighing over 200,000 lbs., it is a collector's dream on wheels with its various compartments, flowery carpeting, walls of polished walnut, mahogany paneling, and brass fixtures.

Last year the Strasburg Rail Road carried 350,000 passengers, but the auto-fuel shortage is expected to cut the figure for 1974 considerably, reports L. P. Cummings, Lancaster, Pa.

A former Southern Region steam loco, No. 30541, class Q, is being preserved by a locomotive fund for eventual use on the Dean Forest Railway in Gloucestershire, England. She was rescued from the scrap yard at Barry, where she had been for eight years. The Southern Ry. Q Class Loco Fund is paying for the preservation and needs help in the form of donations and publicity. Contact their secretary, Dept. RN, 9 Springmeadow Rd., Lydney, Glos., England.

The big fire at Chelsea, Mass., last fall moved Frank Kyper, editor of *The Railroad Enthusiasts,* from his post as Boston & Maine crossing tender. Frank left the annual enthusiasts meeting for his office in scenic downtown Chelsea and arrived to find the area in flames. So says the Portland, Me., 470 Club newsletter. The crossing shanty where he works is currently the only structure standing on the south side of the B&M tracks at Everett Avenue. When Frank thought the shanty was a goner for sure, he cleared out everything that could be carried, taking it to the Spruce Street shack, which later burned to the ground. The B&M's loss was relatively light. Passenger service on the eastern route was halted at 4:30 p.m., but returned at 10:30 a.m. after four morning commuter trains had run over the Saugus branch.



Train of Philadelphia's Frankford Elevated Line is shown passing by Elfrethey's Alley, reputed to be the nation's oldest residential court, built in early 1700's and extending between Front and 2nd streets, as seen Nov. '73.
Bob Storks, 1421 Arch St., Philadelphia, Pa. 19102

Overland Chapter of NRHS has started an ambitious project on their contribution to the upcoming U.S. Bicentennial. It asked 391 railroads listed in *The Official Guide* for copies of their corporate histories for the purpose of publishing a volume of condensed history of American railroads. Over 150 roads have responded. This project will continue this year and into 1975, culminating in the publication early in 1976.

The chapter also is planning a special tour for Easterners attending the 1974 NRHS outing in San Francisco. Apparently they will sandwich a day on the *Rio Grande Zephyr* in between two airplane trips on the way West. Plans also are being made to ride the California Western's *Skunk* before the Convention begins on Aug. 29th. Contact the chapter at 320 Wisconsin Ave., 510 Oak Park, Ill. 60302.

A unique course in Canadian history is being taught at one U.S. high school because of Charles Bohi's interest in railroad stations. Charlie, who is a teacher in Hartford, Vt., told *CP Rail News* that his fascination with railway stations reached the point where he decided to offer a course on Canadian railways and Canada itself to his students.

His interest goes back to 1961 when "it became clear to me that many depots in my native Iowa were about to disappear forever." He began photographing rail stations "before it was too late" and soon after was pursuing his hobby in many other states.

"In 1969," he says, "while planning a trip to North Dakota, I thought that a few Canadian Pacific and Canadian National depots might provide some interesting variety."

By the end of 1973, Charlie Bohi had photographed more than 150 depots in Ontario and Manitoba, 400 in Saskatchewan, 100 in Alberta, and had the start of a collection from Quebec and British Columbia. Says he: "I hope to do more in Eastern Canada in the summers ahead."

PHOTOGRAPHS OF THE MONTH

Southern Railway train No. 6, *The Piedmont*, bound for Washington, D.C., on Nov. 25, 1973, pulls into Charlotte, N.C., on track 1. Ready to greet arriving varnish is Becki Calvert.
Photograph by William T. Morgan

Steamtown doubleheader, with ex-Canadian Pacific 4-6-2's 1246 (Rutland 82) and 1278 (D&H 653), blasting up grade at Summit, Vt., Dec. 29, 1973.
Fred M. Springer, 17 Glen Oaks Ave., Summit, N.J. 07901

Freight trains on three adjoining Southern Railway tracks. Three SD-45s (3113, 3101, and 3160), hooked with slave unit SD-45 No. 3159, approaching with 141 cars, traveling about 40 mph at Dundee, Va., in late afternoon of July 1, 1972.
Curtis C. Tillotson, Jr., College St., Oxford, N.C. 27565

Silhouette of Wheeling & Lake Erie 2-8-4 and freight train near Orrville, Ohio, taken in early 1950s.
Collection of David W. Powell

Carbon County Railway EMD's 1201 and 1202 hauling caboose No. 1 at Geneva mine, near Columbia, Utah, in a driving snowstorm on Jan. 17, 1974. Pictured is the sole motive power and van of 11-mile road that connects D&RGW at Columbia Junction, Utah.
Photograph by Gary G. Allen

Elmer Treloar, 101 California St., Highland Park, Mich. 48203

CP Rail no longer uses the famous beaver as its emblem, shown here twenty years ago on the head end of westbound train 21 arriving at Windsor, Ont., in April '54.

In East Broad Top R.R. roundhouse at Orbisonia, Pa., are locomotives left to right Nos. 18, 12, 15 and 16.
Dan Fink, 24 Seneca Ave., Geneseo, N.Y. 14454

Canadian Pacific branch line way freight leaves Lomond, Alta., on twice weekly run to Medicine Hat, in May, '68.
W.R. Hooper, Box 1662, Golden, B.C.

CP gas-electric No. 9004 with zebra-pattern front waits for crew and new run at Guelph, Ont., on June 25, 1950.
Elmer Treloar, 101 California, Highland Park, Mich. 48203

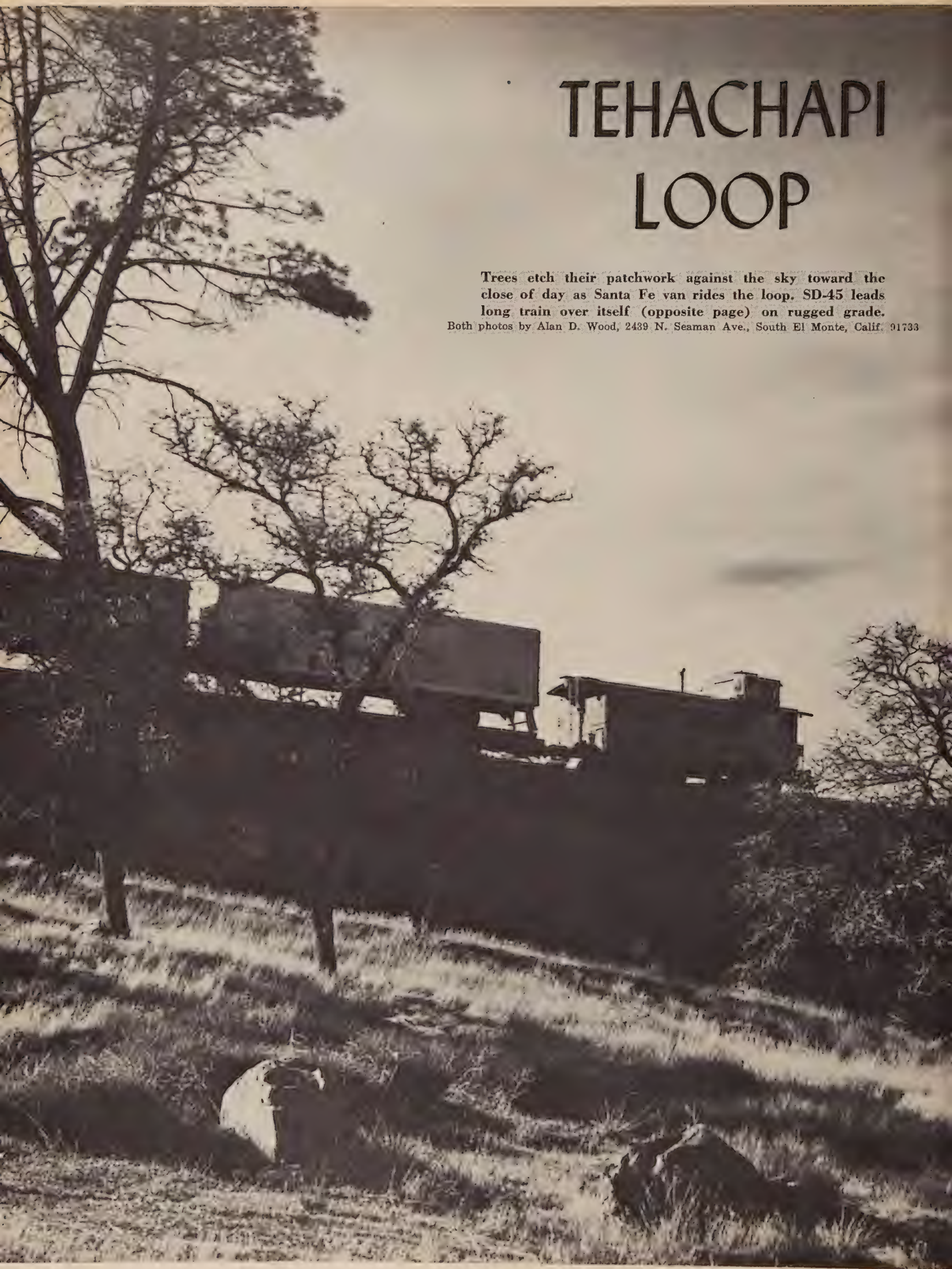
Conductor gives highball and Milwaukee Road's *The Sioux* is ready to leave Madison, Wis., for Chicago, March 13, 1971.
Robert F. Yahnke, 1305 N. Sherman Ave., Madison, Wis. 56704

Streetcar museums have at least two attractions: (1) the cars themselves, of course, and (2) the feminine beauty you see there occasionally. Robert H. Flack made this shot at the National Capital Trolley Museum in the Washington, D.C., area. The ornate, well-built car formerly ran in Duesseldorf, Germany, while the ornate, well-built accessory is a girl named Barbara Peter.

TEHACHAPI LOOP

Trees etch their patchwork against the sky toward the close of day as Santa Fe van rides the loop. SD-45 leads long train over itself (opposite page) on rugged grade.

Both photos by Alan D. Wood, 2439 N. Seaman Ave., South El Monte, Calif. 91733



Santa Fe
Santa Fe

WHEN THE CLOCK STRIKES TWELVE

Fiction Story by E. S. Dellinger

ONE SULTRY summer evening in the days when air brakes were a new thing, "Bud" Mason was called to swing a light on the smoky end of a banana train westbound out of Sayer, with "Slim" Regan at the throttle.

Even a year after he'd given up hoeing corn on his father's farm, Bud still loved nothing better than to ride the fast ones with Regan, though his own black hair stood on end as their train plummeted down Jim River Hill or the Grindstone River and streaked across the narrow valley, making a run for the hill beyond.

He accepted the call, piloted the long-legged Atlantic-type engine, No. 712, out to the train yard, and coupled her into sixteen snow-white reefers loaded with bananas in from New Orleans.

The chubby, light-footed, and determined conductor hurried up the cindered walk with their one lone flimsy. Beside him strode the trainmaster, chewing a dead cigar. The skipper read their order to Regan while the others listened.

Eng 712 run banana extra Sayer to Dawson with right over all trains except Numbers 3 and 6.

Incorporated in this order was a schedule which required them to leave Sayer at 7:00 p.m., and arrive at Dawson five hours later. The lean young runner reached for the tissue. As he grasped its full meaning, a faint smile drew down the corners of his mouth and a gleam flashed into his eyes.

Regan has received similar orders during his undisputed reign as speed king of the Ozark Division. The brass collars had a habit of running slow men out on drags, whenever they had a belated fruit train showing, maneuvering him into the fruit train's cab, handing him an "impossible" schedule, and then patting his back when he made it.

The hogger dragged out his open-faced gold watch, glanced at it. Two of his five running hours were already gone. Returning the watch to his pocket, he snapped a finger at the order, and said to the trainmaster, "On this order, Mr. Smithers, we were due out of here two hours ago and due in Dawson three hours from now."

The trainmaster nodded. "That's the way I read it, Mr. Regan."

Slim protested: "No engineer's ever pulled a freight train from here to Dawson in three hours flat."

"A year ago, Mr. Regan, you made it in three hours and twenty minutes. With a year's added experience on the 712, and with one hundred percent air brakes, I figure you could shave twenty minutes off that time."

"If that's the way you want it—"

"That's the way we want it, Mr. Regan. We're holding our banana contract, and a lot of men are working here because we make the time with this fruit. This banana hotshot should have been in Kansas City at midnight. We want it there as soon as steam and steel can make it."

"Then tell your dispatcher to keep the slow ones out of our way and the order boards green. Mason, you line that switch. Skipper, you get the hell back to your caboose and strap yourself in, because when the clock strikes twelve, we're gonna be in Dawson or else—"

Bud Mason lined the switch and caught a reefer pulling by. He did not believe even Regan could take this sixteen-car train over those 140 hilly miles in three hours flat—not without a pile-up in a briar patch somewhere, with the crew underneath the cars.

A sense of disaster was not new to him. The day he quit the farm to go railroading his father had warned that he'd get himself killed, and the thought was always with him as he thundered through the night. Never had it been more insistent than it was at this moment, as he stood atop the head car, watching the switch lights swim back into the summer darkness.

HE RODE the tops a mile, then slipped past the fireman pivoting in the deck, and into the brakeman's seat on the left platform. Alternately he peered back along the racing wheels and watched ahead where lightning shimmered over the ruffle of black along the north horizon.

For an hour, Slim Regan drove the 712 furiously. He worked steam into sag and vale. He raced across flatland and valley, sometimes at eighty miles an hour, and stormed the steep grades, seldom at less than forty.

They thundered through sleeping villages. Sometimes freights were in siding with headlights dimmed and brakeman on the ground, urging them to greater speed with plain and fancy highballs. Always, the order boards were green, and the operators out on the platforms watching their train for hotbox, a fire, or a dragging beam.

Sixty miles west of Sayer, they crossed a post-oak flat and turned down the steep descent to Grindstone River. Bud watched the headlight curve through the dark groves of oak and walnut, and throw its beams along the tangents.

Regan refused to shut off steam. Beyond Grindstone rose the heaviest grade on the division. He worked light throttle, gaining speed for the hill beyond the bridge. When they came down on the curve a half-mile above it, Bud was holding his breath. Regan was running as fast as the wheels would turn.

The fireman, a devilish little Irishman with a bandana knotted over his curly black hair, came up out of the deck, gripped Bud by the shoulder, and growled into his ear: "Sit tight, man! We won't be in *Dawson* when the clock strikes twelve."

Bud was not sure whether the fireboy spoke in a sardonic jest or really meant it. They stood side by side in the window, peering ahead. Flying drivers were almost into the curve. The front end was wobbling. The fireman, still gripping Bud's tense arm, muttered grimly: "Boy, you stay with her when she turns over, 'cause it ain't no use to jump."

Bud felt sure they were going into the woods. The engineer knew better. With the skill of a master, he kicked a few pounds of air under his drivers to take out the wobble. The racing engine steadied, swayed right, rocked back left again. Regan released his air, opened her wide. They straightened out on the tangent, crossed the wooden bridge, and roared into the ascending grade, rocketing sparks high up toward the starlit sky.

The fireman wiped sweat from his grimy face, tugged nervously at the bandana, and reeled into the deck and after his scoop. Bud felt better at knowing he wasn't the only man aboard who'd been worrying about a wreck.

So far, their run had been free from trouble and delay, but when the speed fell on the sharp, ascending grade a lantern appeared atop the train. It was Regan. He called Bud to his side.

"Skipper's smelled a hotbox," he said. "If we stop to cool it here, we won't make Billings for our meet with Three. And if we don't make Billings for Three, we can't go in ahead of Six, and we won't be in Dawson when the clock strikes twelve."

Slim pointed to the rear. "There's a pail of dope on the back of the tank with a packing hook in it and some sticks of pin grease. Get it and slip back over the train and help him take care of that box. Be careful, now, kid. A brakeman never misses his step but once when he's cooling a hotbox on the run."

Bud had heard of the stunt, but hadn't tried it nor seen it done. Lantern in one hand, tools and packing in the other, he scrambled from tank to car roof and walked the reeling tops back to meet the conductor. He didn't have to walk far. Four cars from the engineer, he heard the squeal of a journal crying for grease. Setting his can on the running board, Bud flashed his lantern over the side, and saw a thread of smoke sweeping back from the forward journal.

He went down the ladder, hung his can on the grabiron, and hooked a leg into the stirrup. Holding himself with one hand, he jerked up the box lid, speared chunks of pin grease with his packing hook, and worked them in around the overheated journal.

The skipper, now on the ladder above him, passed down a pail of water, and Bud threw cupfuls into the box. Hot, stinking smoke and steam came up into his face, but the squeal stopped. Then, fighting for breath, he returned again to the roof.

"You've got what it takes, Mason," the skipper said. "If you stay with us long enough you'll be a brakeman some day."

"Thanks, skipper."

"You stay here and watch this baby till we get into Moundsville. We'll give it a thorough treatment there while we're stopped to take on water."

The conductor went back to the waycar, while Bud sat on the roof watching the thinning wisp of smoke trail straight back from the hotbox.

THEY TOPPED the hill and Regan picked up speed to a mile a minute. It was 10:28 when he spotted the tank at the Moundville coal chute.

Bud hastened over to the tank for more water. The skipper was working on the box when the brakeman came back. Together they cooled it, added fresh packing and pin grease.

"A little more water and she'll run," the skipper reckoned. Then, as he started to the office to pick up his orders, he said. "You'd better ride the engine from here in, because it's gonna start rainin' like hell."

At 10:44 they left Moundville. They'd lost sixteen minutes taking coal and water. In 88 minutes, they had covered 78 of their 140 miles. Ahead of them lay the Jim River Hill and their roughest passage.

As Bud came back into the cab, Regan handed him a lone order with the comment: "I really believe they want these pawpaws in Dawson quick."

Bud read the flimsy: *Number 3 eng 712 take siding meet banana extra 712 at Billings. Hold main line. Meet Number 6 at Endor.*

Number 3 was the *Memphis Cannon Ball*—the streak of varnish which went in the hole for nobody. Bud was grinning when he handed the order back.

"Looks like we'll make Billings for Three," he ventured. "Also, looks like we'll go in ahead of Six and be there when the clock strikes twelve, brakie. But you never know what's around the next curve."

Bud crossed to the left cab window and stood on the platform. They crashed through cordwood towns and blind sidings. The storm which had been raging all night to the north changed direction and was closing in directly across their path. Sheet lightning flashed incessantly, and thunder rolled above the blasting stream of their exhaust.

At 11:25 the green switch lights of Endor grew out of the darkness, and beyond it the emerald gleam of the order board. Though the board was clear, the operator was out with a lantern, signalling slow.

Bud darted down to the engine steps to grab whatever he was handing up. Regan shut off steam and let the hotshot roll. At a mile a minute the 712 streaked by the office. From the bottom step, Bud scooped up a long, loosely folded manila slip from the operator's upheld hand, returned with it into the cab.

It was a message from the dispatcher. Regan held it up to Bud's lantern and read aloud. "Storm on Jim River. Watch out for obstructions and weakened track."

He thrust the message into his pocket and quickly regained the momentum he had lost. A mile out of Endor, they ran into the storm. Dashing rain mixed with hail slanted through their headlight's gleam. The wind whipped it in through gangways and flung it against the windows. To right and left, oak and walnut trees bent toward the ground, swept back again the other way, showering twigs and branches over the track, but not enough to hinder the train.

Regan started down hill to Jim River as he had done to the Grindstone—with brakes off and working steam. Bud wondered if the runner would ignore his message, open up at the foot of the hill, and go racing over the bridge at eighty miles an hour.

He didn't. He set the air, reduced speed to thirty, approaching the bridge with head thrust far out the side window, following the gleam.

Bud also was watching. As they went into the bridge from the east, Regan called to him: "See anything on that side, brakie?"

"Not a thing, hogger," Bud called back. "Nothing but muddy water running down the track."

Regan opened up and started using steam. Then something happened out

ahead where the water had been at play. The right pilot wheel hit a hole. The engine heeled far to the right, hung wavering for an endless second.

The fireman shouted into Bud Mason's ear, "This is it, kid! I told you we wouldn't be in Dawson when the clock struck twelve!"

AS REGAN came to his feet he was clutching bar and brake control; but he neither shut off steam nor used his air; and Bud waited breathlessly for the 712 to take her fatal plunge.

Next thing he knew, the trim little Atlantic had righted herself and was racing ahead over solid track with the engineer working full steam, making a run for the hill.

As they streaked past the bottom field and the double log house in the grove, Bud was alert again and thinking. Number 6 was close behind them, had been all the way.

He strode across the deck and called to Regan evenly, "Ain't you goin' to stop an' leave a flag on that hole against Number 6?"

"Not this time, brakie. Remember we're meeting Three at Billings. Three meets Six at Endor. There's nobody behind us to hit the hole. We'll warn Three's crew at Billings, tell the dispatcher about it, and let him handle it from there on."

Bud returned crestfallen to his post. They snaked up the winding hill. The exhaust quickened into a stream of sound. Regan called him to the right hand side and laid a brotherly hand on his arm.

"You did right in calling my hand on that damned hole, Mason. I could have overlooked it and caused a million-dollar wreck. Now, bring me your lantern, and I'll show you how we handle it."

Regan opened his alligator bag, brought out a clip board and a pad of manila sheets. While Bud held the lantern, he wrote three identical messages: *Bad hole west end Jim River Bridge. Investigate before crossing.*

While he was writing, Bud became aware that the hand which held the lantern was as steady as it had been when he was plowing corn in the bottom field below the tracks.

Deftly he tied each manila slip to a track bolt. Lights of Billings twinkled up ahead. The order board was clear. Regan whistled the station blast, signaled a meet. White lights came immediately into action, highballing through, telling him the *Cannon Ball* was in the clear.

Ignoring their signals, he kept whistling a succession of short blasts, alerting crewmen to a message to be thrown off for them.

The lights quit swinging. Men watched along the track. Bud dropped the first message near the engine, and saw a uniformed brakeman pick it up. The second he tossed off at the rear Pullman. It, too, was quickly found. The third he threw down in front of the telegraph office.

Dawson was nine miles ahead. The watch said 11:44. When they clattered out through the west switch into a long tangent that led across the flats to the city's outmost lights, Regan was singing to the tune of an old camp-meeting song, "When the clock strikes twelve in Dawson we'll be there—"

And Bud Mason was singing lustily along with him. ●

NIGHT ROUNDHOUSE FOREMAN

True Tale by Emmett O'Connell

I WAS ENJOYING a quiet meal of chicken pot-pie and beer on a cool day early in May, 1920, when the telephone rang. Wiley Innis, the night roundhouse foreman, wanted me to substitute for him for a few nights. I agreed because of the time and one half pay.

At 6:30 p.m. I arrived at the shop. There were fourteen engines on the cinder pit and on down into the yards. The house was full, with four extras due in. I checked for personnel, coal, sand, water, and a line-up from the dispatcher. There was no water. Water service men repairing the mains had forgotten to turn on the water after completing their job. No one in the roundhouse knew where the main valve was, so I had the engine dispatcher phone them.

The engine watchman came running. Since he needed more help, we called in two of the day men to double over. The dispatcher was having a fit because I couldn't talk just then. I was worried about so many locos with only one engine watchman. I checked them all while awaiting the day men. One was nearly dry, with four engines between her and the turntable. Her water glass was dry, and gage cocks as well. The fire being pretty hot, I was afraid to work the injector.

Just then the hostler, John Gainey, found his way to me and we finally maneuvered the parched hog into the house. By that time the day men were there and I had them knock the fire in the house pit, which happened to be a drop pit full of water due to a stopped-up drain. Luckily, there was no damage.

The hostler helper informed me that the engine used on the coal tipple was out of commission and we had only about half enough coal for the night. I wondered if it wouldn't be wise to call in all the day men we could get. I told the engine dispatcher to phone Gillette, the lathe man who liked to work on stationary engines. The engine dispatcher couldn't find him, and I never did find out whom he got, but in time they did get things going.

I called in a pipefitter for a leaky train line, and a blacksmith for a broken brake rod. The hostler was moving out a class 100 engine when a brake beam came down. She was bad-ordered and we had to fire up another. Next, we got two tank men to repair the brake beam. Everyone seemed to run at me. This time the hostler helper couldn't get sand. A cinder-pit man whom I persuaded to climb to the top of the tipple found a pair of overalls in the sandpipe!

I had given the dispatcher a start on every thing he asked for, but was still praying. He wanted six extras, the redball, passenger train 210, the Minden passenger, and the local 795. Every engine had a report a foot long, beginning with wash boiler and bore flues. You can't do even that in minutes.

Number 161, a freight hog, had a headlight failure as they moved her out of the house, due to leave in an hour. There was no one to take care of

it in time. So I climbed up to the generator myself (we called them dynamos then). It was an early model Pyle. I removed the brush holder and armature. The ballbearing retainer had screwed itself forward, making the turbine tight against the housing. So I screwed the retainer back until it was flush, tightened the set screw, replaced armature and brush holders, offered another prayer, and turned on the steam. It was okay. Gainey and his helper who had been waiting took her out.

While all this was going on, I tried to run a roundhouse by yelling instructions over my shoulder to the guys crowding the running boards. When I got off, two or three engines were popping and a firebuilder was yelling. I got him outside. He said: "If that idiot boiler washer don't stop scaling the mud ring on the 5510 and get after some of the others, we'll never get anything out. I got on him and he said he couldn't just fill them up, he had to wash them. At that moment the engine dispatcher said the dispatcher wanted more info on the 817. I got on the phone and said she had a cracked cylinder.

"Well, the 871 is on on the spur for backshop," he yelped. "Can't you switch cylinders?"

"Yes," I replied, "in about three weeks."

He said: "Oh, I was just kidding, but we sure need an 800 for the Madison branch."

"Harry," I answered solemnly, "please let's not have any fun tonight, huh?"

I have no memory of copying the engineers' reports on the book or passing out the work slips, but I must have. I even forgot to eat my lunch. The hostler galloped over to me again and said: "There ain't enough steam to turn the table."

I ran all the way to the boiler room and found the fireman asleep in his chair. Maybe he thought a nap was good for his health. I got the long squirt-hose that is attached to the water line, ran it up his pants leg, tied the leg to the chair, and turned on the water. It blew his shirt up over his eyes and Bevy, the engine dispatcher, jerked an air cock open. The fireman jumped up and shut off the water-glass cock, no doubt thinking the glass was broken. It would have been, too, but we got it open there in the dust and darkness.

Now it was really dark. The city electricity had its periodical failure and damn near everybody was running around with coal torches and lanterns. It looked like an old-fashioned flambeau club exhibition. We still couldn't get anything out, because the turntable tractor had come uncouped from the table. No one else was available, so engine dispatcher Earl Bevington and I coupled it on.

Shaking the grates of the 162 on the drop pit, which was full of water, left about an inch of fine ash afloat on the surface. In the light of a coal-oil torch, it looked like solid earth. Jimmy McConnell, one of the machinists I had called out, actually thought it was solid earth and tried to walk across it. He was carrying a hammer, a chisel, a monkey wrench, and the brake rod that the blacksmith had just welded. When he vanished, his helper ran to the office and said Jimmy had drowned.

We ran through the machine shop to the pit. Being unable to find any trace of the missing machinist, I ordered two men to drag the large pit with clinker hooks and then I went back to call the coroner and the police. Meanwhile Jimmy was shivering in the office. He had beaten us there by cutting across the tracks. That guy could swear at me because I was just an extra foreman, and he certainly did. He said that the least we could do was keep the siphon turned on. If it didn't empty the water, it would at least keep the damn water warm enough to take a bath in.

Very much later, Jimmy lived to be general secretary of District 5 of the International Association of Machinists, while I became local president Lodge 469. And after that, Jimmy was a brass collar of the Federal Rehabilitation Administration in Kansas City.

Meanwhile, when the boiler washer yelled at me that it would take at least another hour to get all the scale out of the 1262, I was beginning to get edgy. I screamed that if he did not get her plugged and filled up right now, I'd knock his dental bridgework teeth clear down to this tailpiece.

"All right, all right," said the poor fellow, "I didn't know you were in a hurry."

Right then I was sorry I hadn't climbed to the top of that coal chute, taken the overalls out of the pipe, and jumped off. At last, about six a.m. Bevy got the board marked up. By some miracle, most of the work was done and I was getting ready to call it a night. It was raining torrents.

Hostler John Gainey, full of soot and grime as usual, entered and said: "Mr. Boss, I hope you won't mind, but there's just one other little thing. My helper is standing on top of the tank of the local engine with his hands in the air like a priest giving a blessing, only much higher. He is holding up the apron on the east side of the chute because it won't stay up. Now, if he lets go and empties the coal chute, I can skedaddle the local engine out from under, but then we'd have the redball and the passenger blocked. Will you kindly impart your wishes?"

I opened the door and looked out. As I said, it was raining like hell. Poor McGuire, atop the tank, was soaked, saturated, and sodden. Probably never again will I look upon a more depressing picture of patient abject misery and dedication to duty. Going over to the store room, I got about fifty yards of bell rope, brought it back to John, and said; "Tie it up. Both of them can run if you'll get enough engines out of the way to use the west side chute."

Heartsore and wounded, I finally dragged my poor broken body home. My wife was all sympathy and thought I looked as though I had a hard night.

"Nothing to it, honey," I said.

Next night, Bevy and I wrote a letter to the boiler fireman, chewing him out for being asleep. We wrote that his neglect had caused a delay which cost the company $5.85 terminal time and if he'd remunerate the company by handing over that amount to the night foreman, we'd let the matter drop.

Slim stared at the letter for a minute and then said, "Nuts." We thought he was mad at us; he wasn't. The guy couldn't read.

ROTARY PLOW

IT WAS a cold December morning in 1886. Big puffy flakes of snow blew with increasing rapidity across the small depot at Pendleton, Oregon, where the whole settlement, mostly timber men, freighters, and ranchers, clad in buffalo skins or great fur coats, close-fitting caps, cowhide boots, and mittens, had turned out to witness an historic spectacle.

Judging from the temper of the crowd, raw and gray like the weather, the thing they expected to see was not exactly pleasing. The men were stamping up and down the frame platform, muttering angrily. All eyes were turned toward the white-blanketed right-of-way of the Oregon Railway & Navigation Compny (now part of the Union Pacific system). They waited impatiently for the arrival of a ponderous and slow-moving monster. This monster, they had been told, would facilitate the passage of railroad trains through snow blockades that hitherto had made winter traffic very difficult, often impossible. It was, they were fully aware, the first practical type of rotary plow.

Why should anybody resent the coming of such a machine, especially at a place like Pendleton, in the mountains, that was snowbound for weeks at a time? This new type of equipment had been invented by one of their own number, a quiet robust man named Lewis John Bergendahl, whose black piercing eyes were gazing toward the snow-covered rails with unhappy curiosity from under the peak of a well-worn fur cap.

by L.C. Johnson

Union Pacific photograph

UNION PACIFIC

Artist's conception of a snowplow in action, made for an adv. used in the 1890's. The manufacturer claimed: "We can safely guarantee the rotary to clear ten miles of track to any other steam plow's one, and do the work 50 percent better with but one-half of the motive power necessary."

With a rotary in the background, Union Pacific gandy dancers had to clear hard-packed highway by hand near West Yellowstone Yard, years ago.
Union Pacific Railroad photograph

Such an occasion should call for rejoicing. Why, then, did almost everybody look sullen and menacing—more like a lynching mob than a reception committee? Let's look into the inventor's life for a clue to their reaction.

Lewis Bergendahl was born in Germany on December 4, 1849. Being mechanically gifted, he served as a watchmaker's apprentice in Sweden before emigrating to the United States as a young man and becoming a citizen of this country. His first employment in America was in the hard-coal region of northeastern Pennsylvania, around Kingston and Wilkes-Barre, building shafts for mine pits.

At the age of about 35, Louie took another long jump. He moved to Pendleton, with his family, to take a job as water-service foreman for the Oregon Railway & Navigation Company. His beat stretched for about 200 miles from Umatilla across the rugged Blue Mountains and high plateaus of eastern Oregon to Huntington on the Snake River. It was Louie's duty to see that all OR&N locomotives in that desolate territory were kept supplied with water.

Back in those days, in localities which had no adequate mountain stream or spring, the railroad depended upon deep wells, the water from these being pumped up by great windmills. Whenever trouble developed at a pumping station, the water-servicing department sent a man there as soon as possible to make repairs. Louie was given a rail velocipede in which to travel over his beat. In the winter, when he could not use it, he would ride freights to wherever he had to go; and then, his job completed, he would sit in the snow by the water tank with a lantern to flag a train to get home.

IN 1885, the year before our story opens, if you had been standing at the tiny depot in Telocaset, Oregon, a helper station 100 miles or so east of Pendleton, on a certain bitterly cold, snowy, windy day in late December, you might have glimpsed through the snow-curtain the solitary figure of Louie Bergendahl climbing the windmill tower at that point, grimly battling the storm that nearly blinded him.

Above, the immense wheel on the tower stood idle despite the gale. The shaft it was mounted on was tightly frozen in its bearings. This had to be released, so that water could be pumped up for woodburning locomotives. Painfully and laboriously, Louie chipped away the ice which held the shaft rigid. Once more the wheel began to revolve, slowly at first, then with increased rapidity.

Slipping to the ground from his precarious perch, the foreman watched the wheel for a while to be sure it was all right. In doing so, he noted the flying snow's action as it struck the intricate maze of fins, struts, and braces now revolving at high speed. He observed that, instead of blowing through the wheel, the flaky substance was thrown violently to the side as it struck the gyrating blades. And then, suddenly, there came to him an idea which was to revolutionize winter travel in the mountainous West. He had discovered the secret of how to make the rotary plow successful!

The principle of this device, as you know, is that of a swiftly rotating wheel equipped with knives and scoops to cut and throw aside the snow which piled up on railroad tracks.

A crude plow of that nature, devised in 1869 by a Toronto dentist named J. W. Elliott, consisted simply of a wheel having four flat arms rotating on a shaft in line with the track and designed to whirl the snow to one side.

In 1883 this primitive idea had been improved upon by a man named Orange Jull, who lived in Orangeville, Ontario, not very far from Dr. Elliott's home. Mr. Jull added a second wheel which revolved in the opposite direction. This was intended to act as a knife or cutter that would pass the snow into the inner or fan wheel. Jull's knife wheel was placed on a shaft, revolving inside a larger and hollow shaft on which the fan wheel was fastened.

The Jull rotary plow was tried out by the Chicago & North Western Railway in the winter of 1885-'6, but was found to be clumsy and impractical. The friction created was absorbing more power than that required to cut and throw away the snow, and so the Jull plow was discarded. The railroad world was ripe for a new invention.

Louie rushed back from Telocaset, announced his discovery to his wife and family, and began transforming his cabin-like home into a workshop. He brought his lathe into his kitchen from an unheated shed in the rear and set it to work fashioning, in his few leisure hours, the parts for a small model of the snowplow he had in mind. His patient wife and the older children took turns holding the smoking oil-lamp over the lathe as he worked, far into the night, for many weeks during the

long, and snowbound Oregon winter.

The model which he completed in the early spring of 1886 measured about 30 inches long by 18 wide. His knowledge of the watchmaking trade had enabled him to perfect and insert an ingenious arrangement of clockwork springs which made the miniature rotary revolve in a realistic manner.

To test his model, Louie bought several sacks of flour and dumped them in heaps across the floor, and then pushed his little machine through the snow-like obstructions. When it threw the flour aside in white clouds, leaving a clear path behind, Louie chuckled in glee. He was convinced that a larger and more powerful version of the same device would clear railroad tracks of snow.

To further satisfy himself of its practability, the inventor tried out his plow model in a sand pit at Juniper, Oregon, and there it worked equally well. Louie had golden dreams of national recognition.

He knew that the railroads of the West, including the OR&N, were badly in need of such an invention. Their only available plows were the wedge and flange types, all of which were useless when confronted by very deep snowdrifts. In the winter of 1884-'5, Louie was aware, traffic on the OR&N had been tied up for a month. During that time, snow had wrecked 14 of the company's locomotives and many cars and much maintenance-of-way equipment. The only possible way for the OR&N to clear its line in those days was to put great gangs of laborers to work with picks and shovels—a slow and costly procedure. And so, as soon as Lewis Bergendahl had patented his device, the company he worked for offered to buy it from him. Not satisfied with the price they set, Lewis turned it down.

REJECTING that offer was the biggest mistake Mr. Bergendahl ever made in his life. He didn't know it then, but he found out very soon. Mr. Bergendahl was a mechanical genius and a scholar. He spoke several languages fluently, but he was no business man. He arranged with an engineering firm in the East to build a snowplow from his model, with the understanding that he should share the profits.

Little did he realize then the ruthlessness of the gods of industry. The Bergendahl plow was made—not one, but many of them—but Louie himself did not benefit. The firm which manufactured the plow he had invented did not even attach his name to it. Somebody, it is said, found a loophole in his patent, and Lewis Bergendahl was tossed aside like the snow.

No wonder there was bitterness in the hearts of the inventor and his fellow townsmen as they stood on the platform of the Pendleton station that December Day in 1886 and waited for their first glimpse of the rotary plow which was Bergendahl's and yet was not Bergendahl's. They watched the blunt-nosed monster, pushed by a couple of diamond-stack locomotives, crawl up through the valley and come to a panting stop at the depot.

The man in charge of the new machine was a member of the firm which had manufactured it. He surveyed the crowd from the plow's doorway. The Pendletonians were all for Bergendahl. They felt he had been tricked out of the fruits of his life's work. They glared their hate at the manufacturer, who had cautiously stepped from the rotary and was now standing on the platform.

A harsh cry, "Start the wheel and throw him into it!" was taken up by the hardy men of the big woods. Iron fists reached for the Easterner. Mob violence was in the air. The man paled, shrank back into the door of the plow and quickly bolted the door. Bergendahl's friends pounded upon the machine, determined to wreck it. But Lewis himself intervened. Elbowing his way forward, he climbed the steps leading to the door of the plow's interior, and addressed the unruly mob in firm and even tones.

"Don't do it, men!" he pleaded. "Violence never gets you anywhere. What if you destroy this plow? It wouldn't do you or me any good. Two wrongs don't make a right. I'm going to fight this case in court; and if you wreck this machine, it will only make things harder for me."

And so he dispersed the crowd without any harm having been done. But Mr. Bergendahl never got one cent out of his invention, although countless numbers of rotary plows based on his original design have since been made and put into use the world over.

Like many other men whose inventions have helped mankind, the former watch-maker was deprived of the fruits of his labor by people he had trusted.

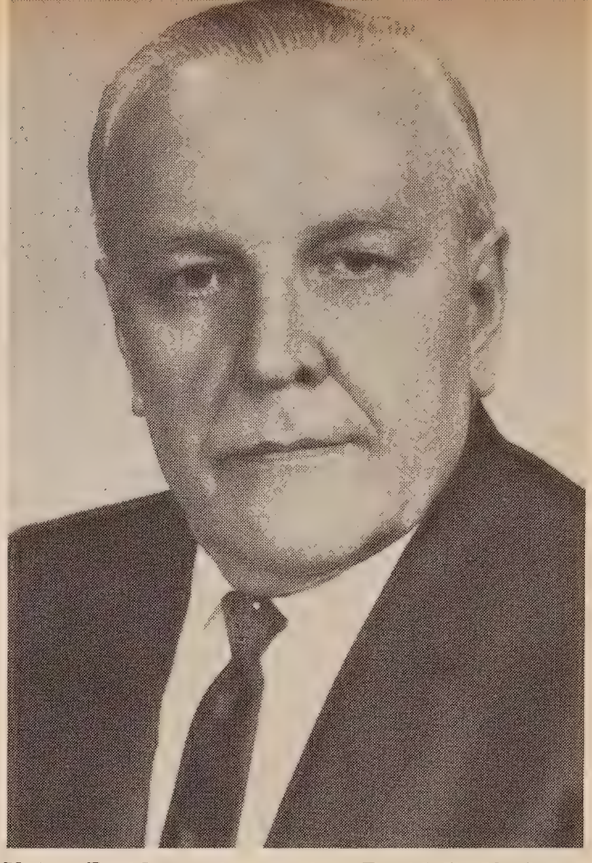
In vain he put his claims in the hands of Roscoe Conkling, one of the ablest lawyers of his day. Conkling died while the case was pending in the courts, and the expense of beginning litigation anew was so great that Bergendahl quit in despair. He left the country, a disillusioned man; and taught at a naval academy in Chile for a couple of years. Then he returned to the United States and took up his old trade as watchmaker. Death came in 1931.

The giant rotaries, mighty, spectacular, which later cut their way through towering drifts of snow, clearing the northern rails for traffic, were practical memorials to the genius of Lewis John Bergendahl.

Rotary, built by Alco in November 1925, had 20x24″ cylinders, burned coal.

A GIANT Among Motive Power Men

by JAMES R. EDMONSTON



Union Pacific engine genius, David E. Neuhart.
Union Pacific Photograph

WHEN the Union Pacific hired the young and rather shy David E. Neuhart as a wartime coach cleaner at Salt Lake City in June, 1918, nobody dreamed that he would eventually become General Superintendent of Motive Power and Machinery for the entire UP system, a giant among motive power men and responsible for the development of the world's largest and most powerful diesel locomotives!

Yet such was his record, part of it anyhow. Let's take a look at that record. With a natural bent for machinery, Dave was not happy with the dull routine of cleaning cars. Even so, he stuck it out for eight years, putting his ingenuity and pride of accomplishment into whatever he did. Then he transferred to the more vital Mechanical Department. That started him up the ladder. Eagerly he worked in UP shops at Salt Lake City, Cheyenne, Kansas City, and Pocatello, all of them famed in boomer lore. But Dave himself was no boomer. He stayed on the same railroad all of his working life, constantly maturing as he went along.

In 1942, with another world war raging, he became the master mechanic at Los Angeles. This gave him the authority and obligation to keep UP wartime motive power rolling. While cannons were booming and bombs falling overseas, the railroad men at home toiled to the point of exhaustion to move munitions and troop trains over the rails.

Neuhart did so well that on April 1, 1949, when the aging John Gogerty retired as General Superintendant of Motive Power and Machinery, the former coach cleaner succeeded him, with full control of every UP motive power decision! Our hero had at last arrived. As top man in his field, he strove for the highest possible horsepower in the least number of units and thus made the railroad company which paid his salary famous for its gigantic freight-haulers.

Men who know the industry will tell you that the UP's monumental power put it away out in front. Union Pacific people are proud of the tradition that, in some respects, their road is the biggest, the best, the greatest. Their motive power men have long been accustomed to big engines, a fine plant, and plenty

Union Pacific's No. 6900, an EMD DD-40X 600 hp *Centennial* freight locomotive, hauling long string of cars.
Union Pacific Railroad

of traffic. Such a carrier could well afford to be inventive and individualistic, as indeed it was during the Neuhart era and even before that time.

Early in this century William R. McKeen, Jr., who was then motive power chief of the UP, developed the knife-nosed self-powered cars which preceded their distant cousins, the diesel-electrics, and which bore his name. Then, in turn, Otto Jabelman, a transportation giant in his own right, gave us the Challengers, the huge Northern types, and the superb 4-8-8-4 Big Boys.

Dave Neuhart grew up around these wonder-working machines and later participated in the advent of the diesels. From the very first, Union Pacific seemed never to be satisfied with the stock diesels of the day. Its great tradition kept cropping up; Omaha was always willing to try something new. So from an M-10000 "Earthworm" streamliner of 1934 to the mighty "Centennial" DD-40X units of 1969, the 1948-'70 period of this road's major achievements in diesel progress was almost exactly Neuhart's term of office.

Union Pacific hallmarks of the diesel era include a pleasing red and yellow color scheme applied to all road units from M-10000 on. Some early diesel switchers were painted black with yellow lettering, but now all UP locos sport the familiar bright hues. That system never adopted a "one-builder" policy, but catered to all leading suppliers. It has owned every non-custom model of EMD's E units, also the first Fairbanks-Morse Erie-builts. The UP was first to buy the world's most powerful switcher (F-M's H-20-44), was a pioneer in low-nose power (July 1959), and is credited with much of the success of General Electric's entry into the domestic road-unit field. Actually, by developing the turbocharger they pushed EMD into today's high-hp market.

Even though he didn't have anything to do with the construction of the UP's famous 4-8-8-4 *Big Boys*, Dave Neuhart grew up around these mighty engines and their power must have given him ideas. No. 4000 is shown taking on water at Hanna, Wyoming, before her tender is filled with coal to 28-ton capacity.

As for UP's turbocharger program, experiments with EMD's 567 engines at Omaha led the builder to produce and sell GP-20 and SD-24 models, paving the way for the "second-generation" revolution, led by the turbocharged

GP-30. In 1955 the Omaha Shops—that is to say Neuhart—applied AiResearch and Elliott turbochargers to nineteen stock EMD GP-9's thus giving rise to the "Omaha GP-9M." Results were so effective that EMD produced its own turbocharger in 1959, and fifteen of the "Omahas" were rebuilt with EMD turbochargers.

Meanwhile, nine more Union Pacific GP-9's were testing the new EMD turbo, in consequence of which 47 additional Union Pacific GP-9's were converted to "Omaha GP-9M." Then in November 1959 the EMD brought out its first stock GP-20. Thus began a new era, an era which owed much to Union Pacific and brilliant Dave Neuhart.

When he took over as motive power chief in 1949, the railroad had on its property a General Electric demonstrator lettered and numbered UP 50. It was a huge, double-cabbed, gas-turbine freighter riding on four 4-wheeled trucks and rated at 4500 horsepower. In 1948 General Electric had brought out this demo in solid black as its No. 101. After tests on the Nickel Plate and the Pennsy it went to the UP for prolonged service study.

The performance must have been impressive, for in 1952, at Neuhart's direction, the Union Pacific bought ten gas-turbines of identical design except for the loss of one cab. They were numbered 51-60, all 4500 horsepower.

Union Pacific GP-30B No. 733B, seen on May 20, 1972 at Council Bluffs, Iowa.
Photograph by George R. Cockle

Then in 1954 the same road ordered fifteen mechanically identical turbines, Nos. 61-75. These were distinctive in that a walkway was built into a recessed area in their sides, known as "verandah" or "gallery" styling. Dave Neuhart was really open to new ideas. Four years later the C-C "Big Blows" began arriving, thirty of them, numbered 1-30. These were two-unit locos, the lead unit being a control cab with a small 850-hp diesel in the first unit for hostling and starting the massive turbine that was carried in the second unit.

In 1964 Neuhart raised this machine's original rating of 8500 hp to 10,000, making the mighty "GTEL" the world's most powerful locomotive of its time! Thus he carried on the Union Pacific's tradition of the most horsepower for the least number of units. But the gas-turbine, for all its might, was eventually eclipsed by the high-horsepower, turbo-

Photograph by Louis A. Marre

UP Alco C-855 No. 61 shown at unknown location. This was Alco's biggest-ever unit. All 855's have now been scrapped.

charged diesel units of today. Neuhart phased out the first turbines in 1963 and ran the final "Big Blow" in 1969.

But even while the turbines were screaming across the Wyoming wasteland of sage, cactus, and rattlesnakes, the brass collar in charge of them was still thinking big. The fruits of bull sessions between representatives of the UP's Motive Power Department and the erecting halls of Alco, EMD, and General Electric became today's monster diesel units which run only on the high iron of Union Pacific and its Southern Pacific neighbor. Neuhart himself worked out their design for a custom-built job, as was the UP way. In tribute to him, here are the details:

EMD DD-358, a 5000-hp double-engine road-freight unit on two unique 4-axled trucks, was offered in Sept. '63 as a B unit only—a great square block of power to be used between two conventional GP-35's. Thirty units of this configuration were sold to the Union Pacific and Southern Pacific. Each unit consisted simply of two cabless GP-35's on a common underframe, using two 16-cylinder 567D-3A's driving eight traction motors.

Dave Neuhart was quite proud of this design. However, he ordered fifteen units with cabs at one end—a model designated DD-35A. These were built in April and May, 1965. The DD-35A looks like two SD-45's joined at the radiator fans, with a cab at one end. It rides on a long underframe on two

UP No. 73 EMD DD-35 idling outside house on June 6, 1965 at Council Bluffs.
R.L. Schmeling, 3801 So. 40th St., Lincoln, Neb. 68506

No. 5038 General Electric U-50-C at Council Bluffs diesel terminal in 1972.
Collection of R.L. Schmeling

UP 1954 "Verandah" 4500-hp turbine with fuel tender at North Platte, Neb.
Collection of R.L. Schmeling

Union Pacific No. 3399 SD-24m slumbering in Council Bluffs yard before going out on freight run to west in June 1972.
Photograph by George R. Cockle

56
UNION

Long a bastion of Union Pacific steam were the huge roundhouse and yard facilities at Green River, Wyoming. The 3802 is shown backing out to be hooked on a manifest for run to Pocatello, Idaho. On nearby track sits Turbine 56 being serviced for future run. Neuhart's design on 36 is quite apparent.

Photograph by Richard Steineheimer

four-axle trucks with huge fuel tank slung between. UP numbers are 70-84. The twenty-seven Union Pacific DD-35B's are numbered 72B-98B. The Espee DD-35B's are 9500-9502.

In keeping with his policy of trying just about everything available, Neuhart gave Alco a shot at the double-engine market. Thus in June, 1954, Alco's mightiest effort rolled proudly out of the erecting shop at Schenectady, N.Y., in the form of Union Pacific No. 60, a clean-looking 5500-hp C-855.

This beast rode on four type-B, four-wheeled, road trucks, giving it a B-B-B-B wheel arrangement, utilizing the span bolsters and trucks from the retired 4500-hp gas turbine locos.

It had 2 16-cylinder Alco 251C diesels, each rated at 2750 hp, and in appearance was two C-628's joined at the radiators, with a cab at the extreme end and only enough short hood to provide collision protection. A common fuel tank was slung between the two sets of trucks, drooping low in fish-belly fashion. Two C-855 cabs were built, the Union Pacific 60-61; a B unit, C-855B, or Alco spec DL-856, had everything except a cab. Union Pacific operated the three units as a set with A-B-A configuration part of the time. But the Alcos were not overly succesful, for various reasons, particularly engine trouble, and after a while were retired.

Union Pacific and General Electric have long formed a close-knit team, dating back to 1939, when GE demonstrated its "Flash Gordon"-style steam turbines on UP. Of course, we have seen what the UP-GE did with the more conventional gas-turbines. It follows then, due to Neuhart's insistence on giant locomotives, that GE entered the double-engined field with the distinctive U-50.

The theory is a twin U-25, with two 16-cylindered FDL-16's providing a total of 5000 hp. However, this loco bears little or no resemblance to the U-25, except for clean sides and a wide-open radiator area at the extreme end. It rides on four type-B four-wheel trucks and has a fearsome-looking, high-mounted cab over a rounded nose, aircraft style.

A U-50 bearing down on you is almost a frightening experience. Directly behind the cab a screened area encloses a mighty blower. The four trucks are really two sets, with each pair joined by a span bolster. Twenty-six U-50's were built, UP getting twenty-three (Nos. 31-53) and SP three (9550-9552). The running gear for the first UP U-50's came from the original ten 4500-hp gas-turbines. GE (but not UP) has since modified the model number of U-50 to U-50D, thus differentiating between those on four-wheeled trucks and the U-50C which rides on two six-wheeled trucks.

In 1969 Union Pacific ordered forty U-50C's numbered 5000-5039. They ride on the C trucks traded in from the last batch of gas-turbines, the "Big Blows," and were built from September, 1969, through 1970, the year in which Dave Neuhart retired. The U-50C was a Union Pacific design and a

Union Pacific U-50-B No. 41, built by General Electric, shown idling in May 1965 at Council Bluffs, Iowa.
R.L. Schmeling Collection, 3801 So. 40th St., Lincoln, Neb. 68506

UP-only model. Rated 5000 hp, it contains two FDL-12's, a total of 24 cylinders. Radiator area is at mid-unit and a huge fuel tank fills the space between the trucks. The unit is 79 feet long, shorter than U-50 by four and a half feet. The high end cab is the same. Both styles of U-50 are truly gargantuan.

Then EMD delivered Neuhart's masterpiece, the "Centennial," the world's largest and most powerful diesel locomotive. Designated the DD-40X, it came from EMD in 1969 in time for the Golden Spike ceremony which marked 100 years of the Union Pacific. The DD-40X is the natural consequence of the DD-35A, featuring the new EMD 645 prime mover. That huge unit, almost 100 feet long, boasts the distinctive EMD "cowl" nose, or wide cab. Riding on two four-axle trucks, it displays an SD-45 body style, or two bodies joined at the radiator. This monster is unmistakable. Nothing else is like it. Dave Neuhart and the Union Pacific alone could have done it. UP numbers them 6900-6946. The "Centennial" was the culmination of a great man's career—his "Big Boy" of another era.

Meanwhile, in 1968 another Union Pacific experiment under the aegis of Dave Neuhart involved the radical upgrading of SD-24 No. 423. This one was re-engined with a brand new EMD 645 prime mover and a long hood modified to accept a new air system. A new two-speed throttle (Idle-Wide Open) also was tried. In this case the unit runs wide open, its central control being through the generator, on the order of a rheostat. The locomotive is unique in appearance and is now an SD-24M. It has been rated as high as 3600 hp, the same as an SD-45. Later the 423 was renumbered 3100, then 3200, now 3399, and is still in service—a tribute to Neuhart's sound judgment—although its throttle has since been standardized.

Union Pacific also was the biggest user of cabless hood units, or B units. That system and the once-proud Pennsy acquired GP-9B's; but only the Union Pacific has SD-24B's and GP-30B's. The much-publicized "Centennial" units were still coming in from La Grange, Illinois, in 1970 when David E. Neuhart, the giant among motive power men, reached the mandatory retirement age and began taking his pension.

It was the son of a Chicago & North Western section foreman, Carl Sandburg, who wrote: "Death sends a radiogram every day: 'When I want you I'll drop in'—and then one day he comes with a master-key and lets himself in and says, 'We'll go now'." That time for Neuhart was a cold November day in 1973. The long-white-bearded gent with a master-key showed up much too soon, for Dave was only 72 and still had much to live for. Someone should write a book about this great man and his contributions to motive power.

Today, with the giant gone, the world seems smaller. The Union Pacific's motive power policy is now conservative. A shift from the huge-twin-engined power led the management to buy stock, off-the-shelf units from EMD and General Electric. Present orders are for the U-30C, the GP-38-2, and the SD-40-2.

But the UP tradition of individuality and progressiveness, which meant so much to Dave Neuhart, is not dead. Union Pacific has set up two test sections of electric catenary and, although no plans for them have yet been announced, will activate and study these sections, obviously with an eye toward relief if the fuel crisis gets worse. The UP will not be caught napping.

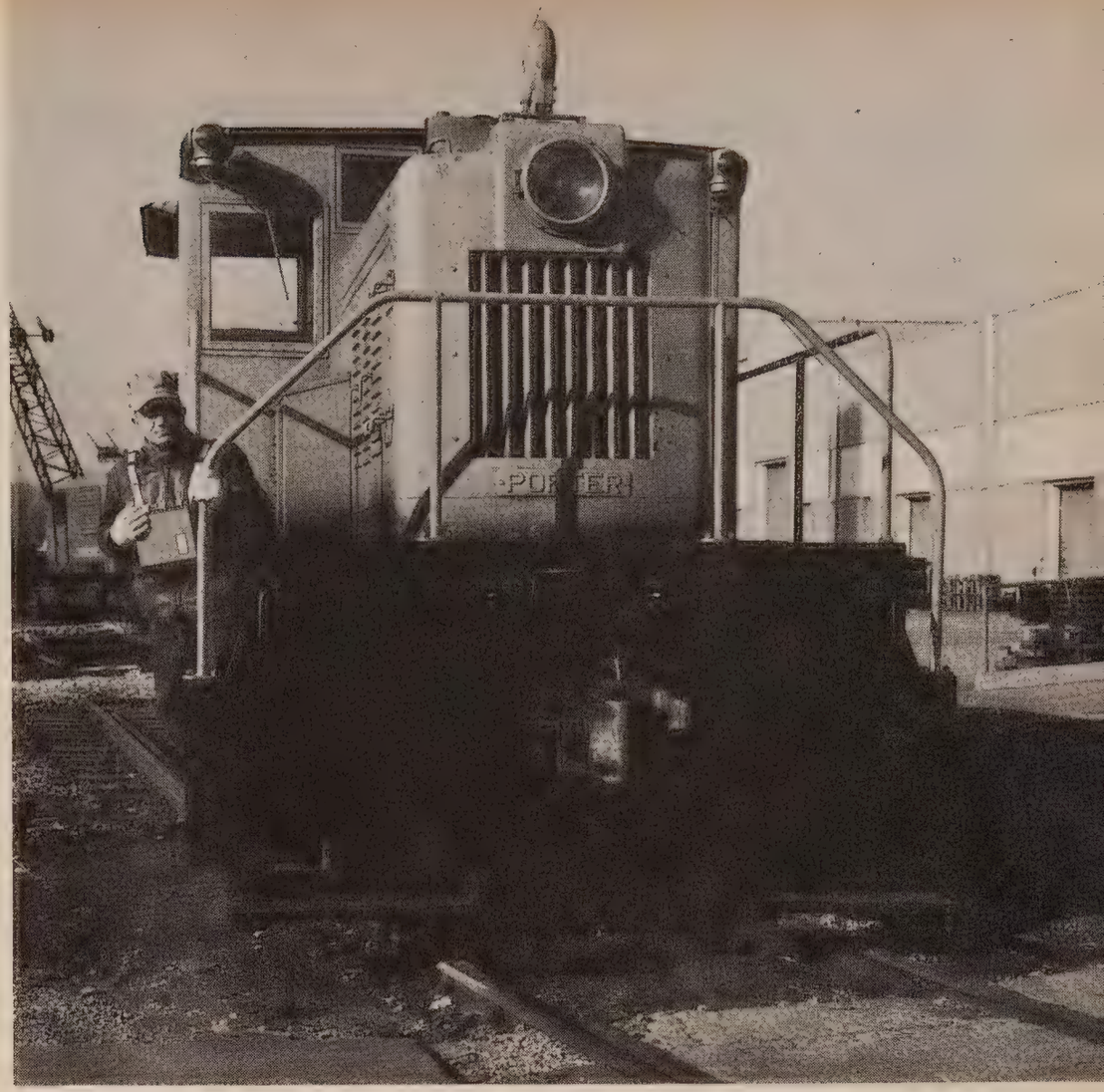
TRACKSIDE IN THE DIESEL AGE

By JIM EDMONSTON

THE COLORFUL old Copper Range Railroad, abandoned by ICC permission in 1972, is now but a memory. According to Tom Roberts, 27 N. 31st Street, Battle Creek, Mich. 49105, who recently visited the line at Houghton, Mich., its Baldwin DS-4-4-1000 engines, numbered 100 and 101, built in 1947, went to the New Hope & Ivyland tourist road in Pennsylvania. Another Copper Range loco, Baldwin S-12 No. 200, is now working for White Pine Copper Co. Sold for scrap were all rails and rolling stock except two cabooses.

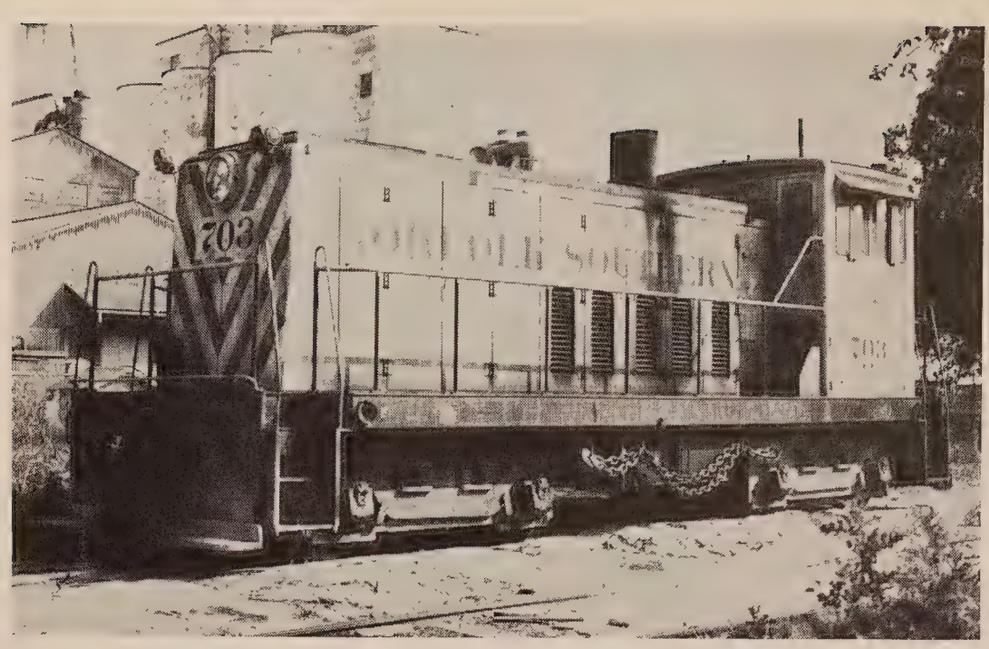
PENN CENTRAL has been having motive power trouble in the District of Columbia, reports Harold Buckley, Silver Springs, Md. Of the three fairly modern EMD switchers recently assigned to the Washington area, two were recently smashed by the crews while the third was rescued just in time. Now handling switching chores at Bennings, on 14th Street, and on the Ivy City team track are three old Baldwins, the rebuilt Alco-EMD monstrosity 5477, several Alco RS-3's, and the huge DL-600's. All this makes the locality an interesting spot for diesel fans. One of the smashed units is No. 9071.

READERS who want more facts about the wreck of the Oro Dam Construction U-25C, mentioned in our January department, can find a detailed account of it in the Oct. '65 issue of *Pacific News*, P.O. Box 283, Burlingame, Calif. 94010. I thank O. W. Brooks, R.D. 1, Box 46, Emporia, Pa., for lending me his copy. We don't know whether or not that issue of *Pacific News* is available. The *Railroad Magazine* office is already all out of its own



Engineer Bob Katone of Porter-built loco holds new Westinghouse Air Brake Co. RCS-30 remote control system box constructed to eliminate need for hand signals and possibility of misinterpretation, in scene at Swissvale, Pa.
Westinghouse Air Brake Co.

Brand new Union Pacific DDA-40X No. 6934, one of the second order for 22 of the monsters, wait quietly at Burlington Northern's Clyde yard, Chicago, with idling UP units enroute to new owners from builder. While U-50C's are delivered fully lettered, the question before the house is why aren't the DDA-40X's? Maybe some reader can fill us in on this.
Paul C. Hunnell, 12213 Gregory St., Blue Island, Ill. 60406



Norfolk Southern 703, a Phase I 70-tonner at New Bern, N.C., last summer.
Tom King, P.O. Box 1656, Wilson, N.C. 27893

Jan. '74 issue, but *may* get more in late spring.

TWENTY new motive power and equipment inspectors will be hired by the Federal Railroad Administration's Office of Safety, which has been given additional funds with which to beef up its forces, reports the *Locomotive Engineer,* official journal of the Brotherhood of Locomotive Engineers. Federal Railroad Administrator John W. Ingram has asked the BLE to assist in the search for the 20 new locomotive and car inspectors.

Engine service employes wishing to apply for such a position may get information and application forms from Fred G. Bremmer, 400 7th St., S.W., Washington, D.C. 20590.

A civil service exam is required. Successful applicants will undergo training before being assigned to duty. The position of motive power and equipment inspector was created by the recent reorganization of the Office of Safety, which gave the 44 locomotive inspectors additional responsibility for the inspection of the more than two million pieces of rolling stock on the nation's railroads.

THE PITTSBURG & SHAWMUT, an 88-mile coal road running between Brookeville and Kittanning, Pa., operates nine EMD 1200-hp SW-9's, built in 1953. It has a rebuilding program on these diesels which includes traction motors, prime movers, and repainting. No. 235 has just been repainted, with the word "Railroad" deleted from the scheme. Nos. 231-239, the entire roster, have about 650,000 miles on them. So says David W. Powell, 80 Western Ave., Brooksville, Pa. 15825. Our correspondent is a P&S trainman. Incidentally, the first word in Pittsburg & Shawmut is spelled without "h" because the company was chartered at a time when the "Steel City" itself was officially spelling its own name that way. Last summer the P&S became well known to rail buffs in connection with a fantrip over which it used a 4-8-4 steamer, No. 2102, ex-Reading, on the Delaware & Hudson as No. 302.

IN OUR February column, typographical errors inadvertently made the dates of the famous 90,000-pound rule 1967, instead of 1937, and the arrival of the 44-ton model in 1969, instead of 1939. Hawk-eyed Jim Seacrest of North Platte, Neb., was the first reader to call our attention to this.

The same issue had a photo of Canadian National loco 1800. CN 1800-1803 were model RSC-24, 1400-hp road-switchers built by Montreal Locomotive Works. These rare locos were constructed from the surplus Alco 244 prime movers out of four FPA-2's when CN upgraded the cab units to FPA-4, using new 251-series engines. Of the original four, three are still in service, 1802 having been wrecked and retired in 1960. The 1800 was never wrecked. They were built in April-May 1959, according to Vincent A. Syrek of Bellerose, N.Y. Photo was made by a resident of Frederickton, New Brunswick. Will someone tell me whether or not the RSC-24's operated there?

THE PUBLISHER of *Penn Central Railroader,* Bob Reid, Box 179, East McKeesport, Pa. 15035, throws more light on Penn Central's C-430's at Mingo Junction. Those locos pull Cleveland-Mingo ore trains when weather permits shipping via the Great Lakes. During the freeze-ups they are assigned to mine runs and hump and switching duties at Mingo. They go to Conway, Pa., for maintenance. Lt. Jay Potter, USN, Almy Court, Newport, RI 02840, sent me a fine photo of six Penn Central C-430's, which I hope to publish with a write-up of this model.

IS THE 468, a General Electric 44-tonner, the Santa Fe's oldest active motive power? She and her sister, the 467, were seen last December at the Somerville, Texas, tie-treating plant by Marvin L. Sutherland, 5742 Creekbend Dr., Houston, Texas 77035, who says the latter is dead and looks it, but 468 is still in service. Both units were built in 1944. Marvin recalls doing inspection work on the 467 while he was a machinist at Newer Yards, Oklahoma City, in 1945.

Of all Santa Fe power, Marvin thinks the finest were Nos. 50 and 50A, the Alco DL-109-110 set. He owns a builder's plate with the old Alco spec number, DL-654, which was changed to DL-109 for A units and DL-110 for B units. They failed on ATSF, due to their poor handling of the highly-advertised *Super Chief,* and were downgraded to lesser runs. There was no trouble-shooting with normal tools, as there had been on EMD's simple E's and FT's, and that fact doomed the Alcos.

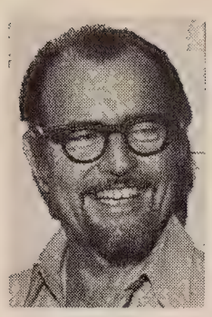
BOTH the Union Transportation Co. and the Penn Central 44-tonner 9999 are still running. Bob Ahrens and Henry Posner, both of Princeton, N.J., told me that after reading *Railroad's* February issue they had to see for themselves. So they drove to Egypt, N.J., hoping to learn what had happened to the 9999. They found her operating tri-weekly. Proof that the UT still offers rail service was the presence of a Burlington Northern covered hopper car at the far end of the line. Incidentally, PC's highest-numbered loco is its smallest in size!

CINCINNATI is active on the trade-in market. Seaboard Coast Line recently sent old Alco road-switchers to the General Electric plant at Erie, Pa., in exchange for new U-18B's, while the Southern swapped RS-3's for U-23B's. A rare find here the other day was SCL 1110, ex-SAL 1536, one of the five 1600-hp RSC-2's. Another interesting sight was a Southern RS-3, formerly Interstate Railroad 34. All of these are now at Erie.

Send diesel info. to me at 821 Clearfield Lane, Cincinnati, Ohio 45240. I will print as much of it as space permits.

Union Pacific westbound extra varnish train about to cross the Mojave River near Victorville, Calif., July, 1953. UP and Santa Fe have a joint operation over this stretch of L.A. Div. track.

Photograph by Donald Sims



INTERESTING RAILFANS
Number 136

J. HOWARD AUDIBERT

by FREEMAN HUBBARD

AS AN UNBORN infant, J. Howard Audibert must have been warmly bundled up when the stork with great flapping wings brought him to Whitefield, N.H., on February 9, 1926, for the mercury was down to 30 below that night. Hard glistening snow covered the bleak surrounding mountains, but it had been scraped and melted off the diamond where the Maine Central crosses the Boston & Maine.

The screaming whistles and bark of Moguls and Ten-wheelers and the rumble of trains could be heard plainly in the new baby's home. Such things evoked fond memories for his father, John B. Audibert, a hotel maintenance engineer who had worked for the Railway Express Agency in his youth and had braked on the B&M's White Mountain Division and whose brother was a railroad telegrapher.

Whitefield is an area of dairy farming with gently rolling hay fields parcelled off by stone walls and rows of willows, birches, and maples. It's a good place to be born and raised in; but "Howie," as his family calls him, is spending his adult married years in Florida, where palm trees wave and snow never falls. He lives in St. Petersburg at 6632 Twenty-eighth Street, South, 33712.

One evening, when Howie was very young, his father took him into a store basement at Whitefield to see, for the first time, a model railroad layout. To the wide-eyed lad the engines and cars seemed huge; but they must have been O gage, his own small size making them seem big by comparison. A New York Central calendar print of "As the Centuries Pass in the Night," hung on the store's basement wall, is the earliest railroad picture Howie remembers. On another occasion his dad took him for a ride on the Mount Washington Cog Railway.

Near his grandparents' vacation cabin on Burns Pond in New Hampshire a concrete viaduct runs under the tracks. Going down to the tracks you descend steep steps and go through a dark moist tunnel that even in those days was adorned with grafitti. Howard and his two brothers and sister would sit and wait for the train.

Upon sighting it, they would tumble down the dank stairs and race into the gloomy viaduct to halt directly under the tracks while the locomotive and cars passed overhead. That thunderous noise made a deep impression on their childish senses.

"The first time I saw a fireman hose down the coal pile in a tender," Howie tells us, "I figured he wouldn't last long on that railroad because he couldn't keep his fire going with wet fuel."

No. 136 never won an award for regular attendance at school. In fact, he often played hookey. One day in his junior year at high his principal gave him an ultimatum: either quit school voluntarily or be expelled. Though his grades were passing, his absenteeism had become intolerable. So our hero quit school in 1943.

Two weeks before his 17th birthday he volunteered for service in the Naval Air Corps. Trained as a radio-gunner, he flew in dive bombers and patrol bombers, but was not in combat. During his training period he journeyed a lot about the States from one assignment to another, and when given a choice he traveled by rail rather than air, every time, cozily billeted in Pullman cars.

Upon leaving the Navy he headed to Kennebunkport, Maine, and with his older brother, Paul, worked for his father at Breakwater Court Hotel. It was a bright summer. Sunflowers and crickets in the tall green grass. Skylarks overhead. Romance in the air.

At Kennebunkport they fell under the spell of two pert little girls from Boston colleges who were work-vacationing in the same hotel, and eventually put wedding rings on their fingers. Howie's choice was Blanche Ruth Pike.

"She was a bright-eyed kid with a helluva figure, a keen mind, and a terrific personality," he says. "My every thought, or so it seemed, was whether or not some other guy would marry her before I could."

And Blanche recalls: "Howie was so different from the boys I'd been dating in Massachusetts that I couldn't resist his sentimentality, his thoughtfulness, wit, imagination, and talent. Despite his love-'em-and-leave-'em reputation

The Berkshire is the most handsome of all locos, in the opinion of our No. 136. Ex-NKP 759 has returned to Steamtown, after trip, in Aug. '71.
Photograph by J. Howard Audibert

with the girls, I said 'Yes' to his proposal three months after our first meeting. We got married in St. Petersburg, Florida, settled down there, and have a daughter, Karen, now 23."

As a youngster, Blanche was tomboyish. "But Howie wanted his woman to be very feminine, so I gave up such habits as climbing trees and football tackling, though I confess that on occasions they still tempt me."

"We like doing things together," she goes on. "Years ago, I helped him with his pin-up photography of pretty girls Many an all-night session we had with Howie doing his own lab work. In lieu of a proper darkroom he'd soup his film at the kitchen sink, using my mixing bowls, in total darkness. I'd wait in the bathroom (door closed, light on), timing him with the alarm clock and calling out 'Start' and then 'Stop.' Sometimes this lasted for hours, often with our windows open. Neighbors must have heard us and wondered what we were starting and stopping all that time."

J.H.A. tells us about the pin-ups. "Early in life I discovered that photographing beautiful girls was just about the most fun of all. Pin-ups fascinated me. One of my favorite models was my wife. But today I seldom take

pictures other than railroading. I am fanatical about not embellishing my photos with people who don't belong in them and are not contributing anything, whether they are pretty or not. To me, railroading is a serious business. A good photo may or may not be improved by the addition of people, depending on various factors. Really good rail subjects are much harder to come by than enticing shots of females. Some of the photos in your magazine are too obviously posed; the model predominates, staring at the camera, while the railroad is only incidental."

That is true. In selecting rail-girl photos, to use in *Railroad Magazine*, we prefer those in which the young woman is integrated into a railroad setting; but very few readers send us that kind.

We like to get pictures of her doing something for a railroad or a railfan project without seeming to be conscious of the camera, we tell the shutterbugs. Show her boarding or leaving a passenger train, selling tickets, collecting fares, checking boxcar numbers, helping to restore an old engine or Pullman car, sketching a locomotive or whatever else a cameraman's fertile brain can devise.

Howie's rail photos have appeared in our magazine (including two front covers). Also *Trains, Railroad Model Craftsman,* and the *Nickel Plate Historical & Technical Society Bulletin.* Others are scheduled for *The Lensman, Rail Classics,* and *Model Railroader.* His first railroad photo showed an Atlantic Coast Line passenger train at the depot (long since gone) in downtown St. Petersburg. Pretty soon there was no more mainline steam. He had got in too late for the big show.

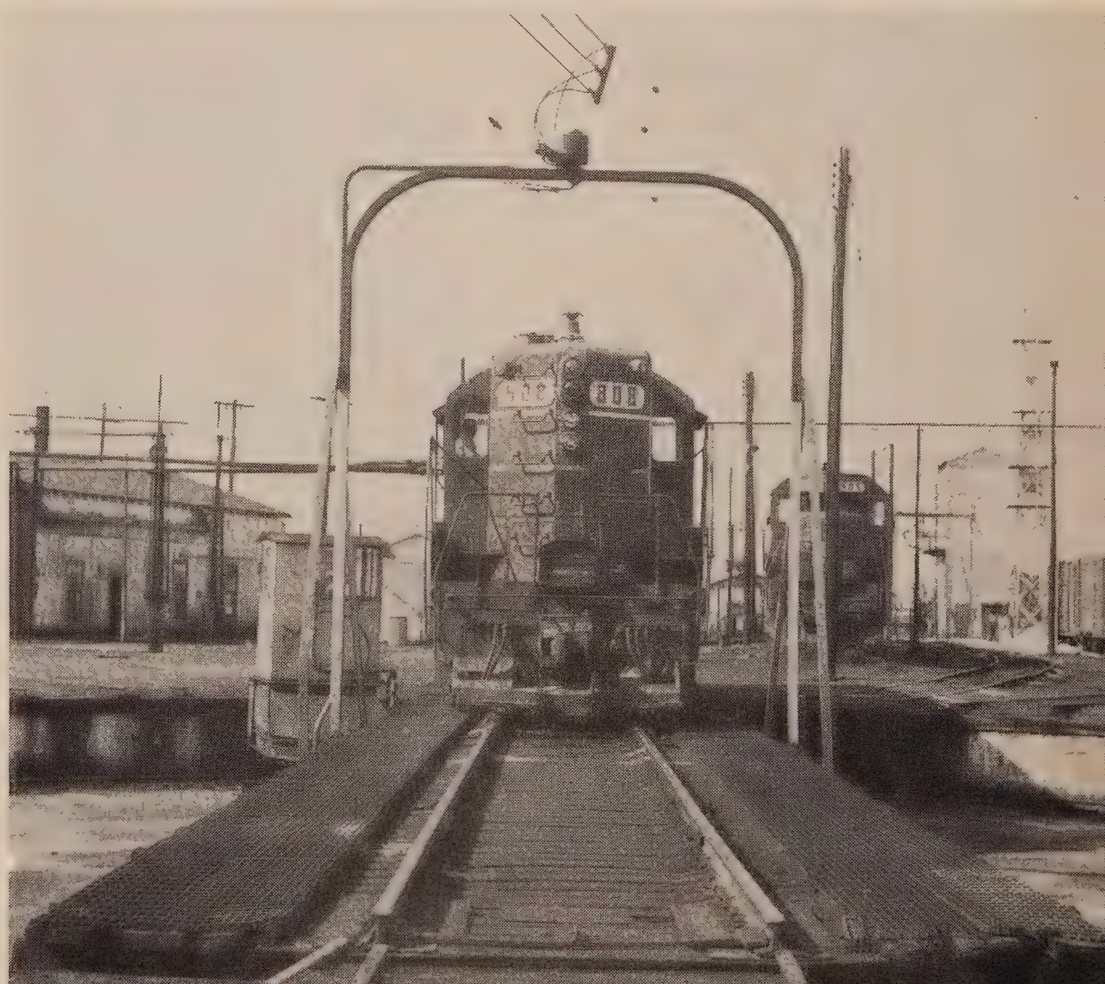
"My wife is helpful and understanding," he says. "She doesn't mind that our vacations are railroad-oriented. Doesn't mind standing quietly in an uncomfortable spot while the tape recorder she's holding soaks up discordant sounds, or picking her way through ballast and cinders in catering to my hobby.

"Last winter we traveled to Canada for the express purpose of picturing railroads in the snow. It was terribly cold stomping around in the yards and alongside the icy tracks, but the days were crisp, sunny, and exciting. Last summer, when we flew to Mexico for train shots, I was saddened to see the fine, old, narrow-gage steamers stashed away at San Lazaro in Mexico City, still serviceable. Someone should buy and use them. I have railroading friends who tip me off to events, new motive power, etc., for photographic consideration. But being much preoccupied with motive power, I often miss other good railroad shots."

Old-time railroad flavor here. Ball and lantern signals at single-iron diamond at Whitefield, N.H., are reminders of long ago days of steam, open end coaches, and wooden hacks. Maine Central runs on upper right track while Boston & Maine uses tracks to left where tanker waits for interchange. This typical northern New England locale is well known to J. Howard Audibert.

Both photographs by J. Howard Audibert

Seaboard Coast Line's EMD 1500-hp GP-7 No. 808 on table at old Seaboard Air Line Gary shops, Tampa, Fla. The shops, built in 1908, were abandoned Jan. 3, 1971 in favor of UCITA facilities. Roundhouse, backshop, table, pit, serving tracks, etc., have all disappeared from what was once a very busy rail complex. In background is 1964, SDP EMD, shown on an afternoon in Feb. 1970.



Blanche and Howard at SCL station, St. Petersburg, Florida, in December, 1973.

Daughter Karen, 23, in car near home.
Photograph by J. Howard Audibert

Howard's avocations also include model railroading and collecting various things. He is a trustee of Allendale Methodist Church, a dreamer, a planner, and a voracious reader, with a railroad library that keeps growing, thanks largely to gifts from Blanche.

"I am grateful," he says, "that so many rail pictures are available in this form, and I'd like to put out a book of my own railroad photos."

He hikes and bikes occasionally, mows the lawn, and makes repairs in and around the house. Like most railroad buffs, he does not smoke. He dislikes sports, hunting, fishing, and politics, but is a registered Democrat.

"Among my architectural clients are nearly fifty doctors," he states, "I find most of them interested in details, demanding, a bit impatient, and know what they want."

One room in the Audibert home is devoted to railroadiana, especially his HO-gage layout, which consists of a steam engine servicing facility complete with sandhouse, coaling tower, turntable and pit, and a five-stall roundhouse. Also a car repair shop and a passenger depot. Howie is a member of the National Model Railroad Association. Later, his admiration for Berkshires got him interested in the Nickel Plate Road and he joined the Nickel Plate Historical & Technical Society also.

"NKP's class 700s were the most practical, most exciting, and handsomest of all steamers," he enthuses. "I made a special auto trip, with Blanche, alongside NKP rails from Buffalo to Cleveland and Bellevue, Ohio, just to photograph all that was left of the once-proud line."

Oddly enough, he is converting his steam-type layout to contemporary diesel and the Seaboard Coast Line because the recent HO diesels sound and look more convincingly like their prototypes than model steamers do. To Howie, the most enjoyable phase of this hobby is its substituting for the real thing in evening and during inclement weather.

We wonder what Blanche does while all this goes on. Years ago the *Saturday Evening Post* published an amusing fiction story about a railfan's wife entitled "Mrs. Union Station."

"There are other things Howie *could* be chasing," Mrs. Audibert says archly, "and I'm happy it's only trains."

He finds joy in riding engine cabs, often while his wife is back in a coach. He manages to get invited up onto the fireman's seat by gaining the confidence of the crew, giving them photos and/or copies of *Railroad Magazine,* and, while in the cab, obeying rules and instructions.

"I've had so many such rides," he says, "that it's hard to remember them individually. Framed photos of all the engines I have ridden form a border high up on the walls around my train-room and help me to re-create each trip in my mind."

Howie has exciting memories of little fires burning in hobo jungles, high-speed limiteds tearing through Old Orchard Beach on the run between Boston and Portland, and open-air trolleys rolling toward Biddeford, Maine. Also those mobile iron mountains known as Mallets, in Virginia, and the *Mountaineer* on the wye at Whitefield Jct., and the gleaming *Silver Meteor.* At times he looked down from a Pullman window on the shining Mississippi River below, or gazed upward at the Rockies, or aboard the *Montrealer* in winter saw the moon tracing patterns on the pale bluish snow for mile after mile, instead of sleeping.

These and other memories. Such as hearing doubleheaded B&M freights labor up the long grade toward Burns Pond while gusty winds blew a trail of engine smoke backward over the car tops. And viewing an early Sperry rail-detection car, and pulling himself up a steel ladder for his first ride in an engine cab. Also the rhythmic sway of a caboose ride in the cupola of a short freight winding through Pennsylvania's lush woods and meadows on a perfect summer evening. Ah, that was the life!

His weight is about 170, just right for his height of nearly six feet. Usually each week he washes his Grand Prix automobile with loving care, but is dead set against the cancer of expanding highways. He'd like to see a community that excludes internal-combustion engines from its area at all times, as Ocean Grove, N.J., does on Sundays only.

"I've given much thought to the subject," he tells us. "I realize there is a genuine need for motor vehicles, especially in rural areas; but I am firmly convinced that an artificial demand has been generated, through advertising and publicity, by companies and individuals which profit from the manufacture and sale of automobiles, tires, accessories, gasoline, and so on. As an architect, I have seen parking garages rise in the heart of town where once trolleys brought shoppers and business people. I have seen plans for useful buildings turned down merely because not enough acreage was available to park the cars of all tenants. And I watch in disgust the almost continuous triple strand of autos, often with only one occupant apiece, flowing past my office.

"Detroit builds cars in frightening numbers, far beyond what is needed,

partly because so many families buy two, three, or even four different vehicles. Of late, however, the energy crisis has reduced this output and cut down the slaughter and maiming of human beings and animals on the streets and highways. This country should have a permanent energy crisis to reduce the casualties, the traffic jams and street noises, and the air pollution. More people should use mass transportation."

Being somewhat of a loner, he seldom goes on organized fantrips, but pursues the hobby on his own, often accompanied by his wife or perhaps one or two other couples with similar interests.

Audibert became an architect through serving an eight-year apprenticeship with a registered architect and then passing a State Board exam lasting four and a half days.

He wired his mother: "Your prayers have been answered. I am a registered architect in the State of Florida." He has done rather well in this profession. Trade journal covers have reproduced some of his building designs. He is also a good writer and has done articles for nationally circulated magazines. At one time he was involved with three other men in a rail-oriented restaurant venture. He designed the proposed building and built an HO-gage model for promotional use, but the project flopped, due to the very high cost of land.

Blanche works in his office as a receptionist-secretary. Also assisting him are two young apprentices. Now and then he takes his tape-recorder to the office and plays his latest reels of train sounds for them. Many of his visitors talk more railroading than architecture.

CP Rail's *The Canadian* shown at Windsor station, Montreal, just before leaving for Vancouver, B.C., on a wintry late afternoon day in February, 1973.
Photograph by J. Howard Audibert

An office complex for Dr. Daniel M. Drake, D.D.S., and his dermatologist wife, of Riverside, Illinois, was designed by Audibert, who is also overseeing its construction. The design will be submitted in the county's annual competition for designs of commercial structures. Howard won the 1972 award.

Dr. Drake writes: "In the center of our lot is a huge old oak tree, which Howard decided to save and build around. As a conservationist and lover of nature, he was able to preserve most of our other trees as well while designing our two-story mirror-image buildings that face an exotic water feature, and our oak and shrub patio topped off with spiral stairs built around a circular elevator. My office, when finished, will have a total of 14 showcases filled with scientific and historical exhibits, some of them railroadiana, including a model railroad layout designed by Howard."

Photograph by Don Munago
Howard works on a portion of his large HO layout in railroad room in home.

Now listen to this from railfan Terry DeFrees: "Howard prides himself on being able to identify all SCL locomotives. He has a knack of converting a standard AHM plastic locomotive model—by cutting, filing, gluing, and adding details—into a true-to-life Nickel Plate steamer that looks just like a picture in one of his many reference books. His pet peeve is kids—kids of any size or shape—in a model or real railroading scene, which destroy the picture for him. His satire is shown in such remarks as 'That's pretty good for a guy with inferior equipment and very little talent,' referring to some work he really likes."

Mrs. Kenneth Goodman of St. Petersburg tells us: "Howard is one of the most sarcastic men you are likely ever to meet. His enthusiasm and energy are astonishing. Last August my husband and Blanche and I went with him on a tour of Mexico, where he took railroad pictures for ten days. Later he left the three of us abruptly at the Mexico City airport, with our luggage to be claimed and plane tickets checked. He taxied over to the railroad yard and took pictures there for 30 minutes, coming back just as we were boarding the plane to return home!"

Another commentator is Thomas I. Hay, also of St. Petersburg. "Howard," he writes, "has the rare abiity

to constantly generate enthusiasm. Because he is very special to us, we can easily forgive his occasional barbed remarks.

"One time he and I formed part of a three-family group chasing trains. Leaving us, he walked down the track with his camera and tape-recorder to a point far ahead of the rest of us. As we heard a train approaching, we piled into our automobile and sped down the road to a good vantage point. How were we to know that where we stopped and got out of the car just as the train roared by was the very spot where Howard had planned to photograph the train from a high vantage point? His comments, captured on his running tape, were definitely unprintable."

Possibly some railfan club would like to listen to that tape at one of its meetings.

It was near midnight on a balmy June evening in 1972 when Fred Clark, Jr., of Clearwater, Fla., first met our *Interesting Railfan* while they were both photographing steam at Jacksonville; and he writes:

"Sometimes Howard almost bubbles over with enthusaism in showing or explaining his own photos or model railroad work. The train-room in his home is fantastic. It measures about 12 by 14 feet and abounds with photos, magazines, railroad books and sound records, signs, spikes, and so on, all well arranged and clean, really a showroom of railroadiana.

"Various acceptance and thank-you letters from the editors of *Railroad, Trains, Railroad Model Craftsman, The Lensman,* etc., are pasted on the walls, as well as Audibert's *Railroad* cover pictures.

"Howard is so proud of his tapes that he will even play the latest one for you on the phone. His wife seems more realistic or level-headed about his hobby than he is himself. She'll tell him what is wrong with one of his photos that he thinks is great. Aside from that, she's a neat housekeeper and a good cook.

"As an architect, Howard has done some fine stuff, including the Highland Animal Hospital, a national award-winning building just down the street from my home. His fondness for animals is well known, so I am sure he put his heart into that job."

The Audiberts have had turtles, white mice, hamsters, a snake, guinea pigs, a handsome black doberman, and even a sick seagull, all during daughter Karen's growing years. Now that she is 23 and has an apartment of her own their only pet is a Siamese seal point cat named Ralph.

"When the big circus pays its annual visit to St. Pete," Blanche says, "Howie and I usually take a long lunch hour to view its arrival in town —by train, of course. Last January we stayed up until three a.m. to watch them load up for leaving. Seaboard Coast Line supplied two of their new GE U-18's to pull the show in from winter quarters in Venice, Fla.; but a single U-36 was on the point as it left town. Howie got several shots, both day and night, of the circus-train cars, as well as the motive power. We also visited the Bayfront area to feed apples to the circus elephants. It's a wonderful, exciting, smelly pastime, and we really enjoy it."

Photograph by J. Howard Audibert

Northbound Amtrak *Champion* blasts past weekending Geep No. 831 at Sulphur Springs, Fla., on a September day in 1973.

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here—as many as space permits. Address Miss Barbara Kreimer, *Railroad Magazine*, No questions will be answered by mail or telephone.

1 ***How are American locomotive engineers handling the fuel shortage?***

According to H. L. Walker, the Cotton Belt's road foreman of engines, they hold a vital key to fuel conservation even before their trains leave the terminal.

"At that time," he says, "when an engineer is charging his train and finds it necessary to increase air-compressor output, in order to reach 130 lbs. per square inch of reservoir pressure, he puts the engine throttle in the third notch. At that point, a four-unit SD-45 engine, for example, consumes 68.9 gallons of fuel an hour; but when the pressure reaches 130 lbs., a good engineer will cut the throttle back to idle, because he knows the compressor will maintain that much pressure. The difference between third-notch operation and idle speed is 62.9 gallons of fuel per hour. Altogether, it saves a lot of fuel, considering the large number of locos pulling our trains.

"Another method, which saves hundreds of gallons of fuel each day, has to do with charging the air brakes and braking the trains. Taking the biggest units we have—and the figures are about the same for our 3,000-hp units—engineers can accomplish much with careful braking. For instance, it would be wasteful to use maximum throttle at the same time as a heavy brake application for controlling train speed. Our best engineers reduce throttle and use lighter or no air brake application and get the same results when they slow a train."

2 ***Where in Vermont did the B&L run?***

The Burlington & Lamoille, organized in 1875 and opened in 1877, ran between Burlington and Cambridge Jct., 34 miles. In 1887 it had 3 locos, 4 passenger cars, and 35 freight cars.

3 ***Name Canadian National's hotels.***

The Queen Elizabeth, Montreal; Chateau Laurier, Ottawa; Hotel Vancouver, Vancouver, B.C.; Jasper Park Lodge, Jasper, Alta.; Hotel MacDonald, Edmonton, Alta.; Hotel Bessborough, Saskatoon, Sask.; Hotel Fort Garry, Winnipeg, Man.; Hotel Beausejour, Moncton, N.B.; Hotel Nova Scotia Halifax, N.S., and Hotel Newfoundland, St. John's, Newfoundland.

4 ***An 1871 ad in Hearth & Home magazine mentioned the St. Paul & Pacific. Where was this line?***

That was the corporate name of the first portion of what became the Great Northern, now Burlington Northern. Begun in 1857, it owned the first locomotive to turn a wheel in Minnesota, the famous *William Crooks,* built by the New Jersey Locomotive & Machine Co. in 1861.

5 ***I'm a pensioned Long Island clerk. If the wife of a retired employee was a railroad employee herself and if she qualified for her own railroad retirement annuity, can she still qualify for a wife's annuity?***

Yes, indeed. She can qualify for more than one type of railroad retirement annuity.

6 ***Words, please, to "On the Banana Local," by Bassett Morgan.***

Drivin' on a tropic railroad,
Narrow-gage in standin' cane,
Hauling sugar and bananas
Through the sun and golden rain;
After hours a yellow-brown girl
Swimmin' with you 'neath the moon—
Sounds too sweet for engine-drivers;
And it was for me, too soon.

Thus I ran banana locals
With a posey in my hair;
I would open up the throttle
And just let the old gal tear.
I'd been thinkin' of the Erie
And the good old Santa Fe,
Forgot I was in Costa Rica
Where the flyin' fishes play.

Rollin' like a hula dancer,
She was burnin' up the track;
Jumped it, headed for the ocean—
Which explains why I'm back.
"Son," the boss said, "when the engine
Starts a-swimmin' round with you,
That's the time you quit the tropics."
Had no choice, and so I blew.

7 ***What can you tell me about the National of Mexico train Aztec Eagle?***

This premier train, Nos. 1 and 2, carries a daily consist of uppers, lowers, roomettes, and double bedroom sleepers, a lounge observation dining car, and unreserved seated coaches. No. 1 leaves Mexico City at 10:05 a.m., arriving at Nuevo Laredo at 6:25 a.m. the following day on the 762-mile journey. No. 2 leaves Nuevo Laredo at 6:25 p.m., arriving Mexico City the next day at 5:21 p.m.

8 ***How many electric lines ran in California in 1939?***

As of June 1, 1939, there were 20, namely: the Bakersfield & Kern Electric, Bakersfield; California St. Cable R.R., San Francisco; Central California Traction, Stockton; East Bay Transit, Oakland; Eureka Street Ry., Eureka; Interurban Electric Ry., San Francisco; Los Angeles Ry., Los Angeles; Market Street Ry., San Francisco; Northwestern Pacific, Sausalito; Oakland Terminal Ry., Oakland; Pacific Gas & Electric, Sacramento; Petaluma & Santa Rosa R.R., Petaluma; Sacramento Northern, Sacramento; San Diego Electric, San Diego and Coronado; San Francisco Muni. Ry., San Francisco; San Francisco & Napa Valley R.R., Napa Jct.; Stockton Electric, Stockton; Tidewater Southern, Modesto; Union Pacific, Glendale, and the Visalia Electric, Exeter.

9 ***Which Georgia road was the R&N?***

The Rome & Northern, chartered in 1909 and opened in 1910. It ran 17.6 miles between West Rome and Gore, had 2 locos, 2 passenger cars and 39 freight cars, went into receivership in 1911, and was scrapped in 1924.

10 ***Tell me about the Raub Central Power loco?***

Built at Paterson, N.J., in 1892, this beauty had two small boilers with a firedoor on each side and a smoke flue going back to the stack in the center. She used vertical cylinders, and power was transmitted to her 8 wheels through a central shaft. She was promoted by amateur locomotive designers who tried to force the idea into use through stock-selling operations. They ballyhooed the engine in the newspapers, with exaggerated claims for speed. The essential idea of the locomotive was sound enough, but the "thing" itself was a total flop.

11 ***What Alaska R.R. equipment is used seasonally on the Mt. McKinley Park Route?***

Trains 5 and 6, operating daily between Anchorage and Fairbanks from May 19 to Sept. 3, 1973, carried coaches, a diner-lounge, and a dome car. The summer train, visiting Mt. McKinley Park, took 11¼ hours for the 356-mile trip. For further info. on that state contact Alaska-Yukon Chapter of NRHS, P.O. Box 2248, Anchorage, Alaska 99501.

12 ***Why did railroads use the term "air line"?***

It described the rail route which followed the shortest distance between two points. One road, the old Seaboard Air Line, is now the Seaboard Coast Line.

13 ***What were the specifications of Union Pacific's rebuilt 3600 class Mallets?***

The UP changed 42 of its 3600-class compound 2-8-8-0's into simple articulated jobs, renumbered to 3500 series. Of the lot, 13 were coalburners, the rest oilburners. Their specifications were: 23x30" cylinders, 59" drivers, 218 lbs. boiler pressure, grate area 88.2 sq. feet, 505,480 lbs. loco weight, and 99,840 lbs. tractive force. The conversion was carried out in the UP shops at Cheyenne, Wyo., and Pocatello, Idaho.

14 ***What happened to the Detroit, Mich.-Windsor, Ont., carferries Huron and Lansdowne?***

These colorful former sidewheelers were converted to car-barges and at last report were still running. They had been expected to end their operation Sept. 1, '73; but, due to the backlog of boxcars resulting from the Canadian rail strike, were given a short reprieve.

According to *Canadian Rail,* the Canadian Railroad Historical Assn. magazine, the *Huron* was built at Pt. Edward, Ont., in 1875 for the Grand Trunk. With a high-pressure, noncondensing 30x30" 900-hp engine built by T. Wilson of Dundas, Ont., she originally carried 24 cars on three tracks. By 1970, only 11 cars on two tracks. The *Lansdowne's* iron hull was built at Wyandotte, Mich., by the Detroit Drydock Co. in 1884 and her superstructure was installed at Windsor by Jenking Bros. in the same year. Originally she accommodated 16 cars on two tracks. Her engine, a two single-cylinder 50x108", 1360-hp machine, was built by E. E. Gilbert & Sons of Montreal in 1872 and came from Great Western Railway's *Michigan* of 1873. Eventually both carferries will be brought back to Sarnia, where the *Huron* began her career some 98 years ago.

15 ***I retired on a reduced age annuity three years ago from the Southern Pacific. I am not yet 65, therefore not covered by Medicare, but I recently became ill and feel totally disabled. Could I now be entitled to early Medicare coverage?***

Possibly. Notify a Railroad Retirement Board office of your disability. They will tell you how to establish entitlement to early Medicare coverage.

16 ***What is the new British Railway train Ex?***

BR plays a leading role in a new company which has 34 industrial-exhibition coaches, some from former privately-owned lines, equipped as conference, hospitality, theater, or reception cars. Operations will cover the whole United Kingdom, where 134 sites in key marketing areas are available, and extend throughout Europe. Some coaches have been reinforced to carry weighty items of machinery. Detailed negotiations with foreign rail administrations have taken place and 57 overseas centers are already marked on the *Train Ex* map. Twelve coaches in the fleet have been modified for Continental use. The company hopes to promote 25 individual exhibition runs each year.

17 ***Info, please, on the old Utica, Ithaca & Elmira.***

Opened from Cortland to Ithaca, N.Y., in 1872, it was extended to Elmira in 1875. Nine years later this road became the Elmira, Cortland & Northern and ran between Elmira and Canastota, N.Y., 119 miles. Leasing the Canastota Northern (Canastota to Camden) brought its mileage up to 139. In 1890 it had 23 locos, 194 cars. It's now part of the Lehigh Valley.

18 ***What metals were most frequently used for contact points in telegraph instruments?***

Platinum and silver. Both were excellent conductors, relatively hard, nonoxidizing and had a high degree of ductibility.

19 ***Tell me about the Tacoma & Columbia River Ry.***

It was chartered in 1895 to run from Tacoma, Wash. to The Dalles, Ore., 145 miles. By April 1, 1898, it was operating 13 miles of trackage between Tacoma and Terminus. Part of this line had originally been the property of the Tacoma, Lake Park & Columbia River, a road incorporated in 1892 and extending, at the time of its purchase by the T&CR (1896) from Tacoma to Lake Park, 11.5 miles. Another gradient absorbed by the road was that of the 14-mile Tacoma & Lake City Railroad & Navigation Co., extending from the north end of Tacoma to American Lake. In addition to trackage, the T&CR owned about 36 miles of terminal on deep water at Steilacoom. At the time of receivership in 1899, it had three locos, four passenger cars, and two baggage cars.

Running Extra

Regarding a recent query about cab signals, such accessories have important advantages over wayside signals besides the obvious one of visibility. Many cab signals indicate continually to the engineer the condition of the block he is moving in, even though he may be already past the trackside signal governing movements in that block. Thus he could learn instantly of a more favorable or adverse change in the condition of the block.—J. Tomisek, Penn Central Signal Test maintainer, 9822 S. Lawndale Ave., Evergreen Park, Ill. 60642.

When the GM&O took over the old Chicago & Alton, what happened to the latter's two Mallets, Nos. 700 and 701? I worked on these Mallets as a machinist apprentice at the Chicago roundhouse in 1924. Anyone have any photos of them?—Joseph Kayda, 3725 Narragansett Ave., San Diego, Calif. 92107.

Charles Wood's book, *The Northern Pacific Mainstream of the Northwest,* answers the date of the Hartford & Eastern's abandonment. It says also that the Everett & Monte Cristo was built in 1893, failed in 1900, was taken over by the NP in 1902, and was assigned to the Rucker Bros.' Hartford & Eastern in 1915. The H&E was operated until its abandonment in 1925. A small BN stub to Granite Falls remains in service.—Gordon Winsor, 230 N. Maple Ave., Danville, Ky. 40422.

The New Paltz & Wallkill Valley, a trolley line, opened August 13, 1897, had an arrangement with the Philadelphia, Reading & New England whereby the latter took the trolleys over the Poughkeepsie Bridge with steam engines. One source of info states this arrangement was annulled about 1900. Another has trolleys going over the bridge until 1923. Which is

correct?—Thomas B. Annin, 402 No. Main St., South Yarmouth, Mass. 02664.

I want info on the following steam loco devices: Barco two-whistle low-water alarm, Byer low-water alarm, Smith & Jackson ash sifter, and Washbon type P4 injector.—Robt. McGowan, Room 32, Church 11, Quad., Rensselaer Polytechnic Institute, Troy, N.Y. 12181.

Answering a query about the Detroit, Bay City & Western: In 1920 it had four passenger trains daily between Bay City and Port Huron. The carrier opened from Bay City to Caro in 1910 and reached Port Huron in 1915, but never to Detroit. The line was steam only right up to its last year, 1953. Its last run had a grim finale: a recently retired engineer died in the locomotive cab following a stroke. The engine sat there some time before being cut up for scrap. In 1951 its remaining 51 miles of track ran between Caro and Sandusky, Mich.—Lloyd Proctor, 7360 Burton St., Romulus, Mich. 48174.

What kind of a radio can I buy to pick up messages between engineers, dispatchers, and station operators? Is there a list of frequencies assigned to each railroad?—Larry Lombard, P.O. Box 3046, Norman, Okla. 73069.

How long were track pans? Which roads used them extensively? Why couldn't a loco go faster than 45 mph over a pan? How long did it take to refill one? How far apart were they? Were they usually far out of town? Could they be used while rounding a curve? Did freight locos utilize them? When did they first come into service? —S. B. (signature indecipherable), 123 Eufaula St., Gulf Breeze, Fla. 32561.

The only railroad comic strip I recall was "Jerry on the Job," in the 1920s. The main characters were Mr. Girney, the railroad president, and a little fellow named Jerry, whom I believe was a station agent. How many readers remember it? Have excerpts from it ever been reprinted?—John Lukko, 225 W. Dunne Ave., Morgan Hill, Calif. 95037.

Re photo on page 19 of your Nov. '73 issue, the man is James Rosencrans, an inspector at the East Syracuse, N.Y., enginehouse.—Douglas Conrad, Box 306, Armdale, P.O., Halifax, N.S., Canada.

How do I contact the New Haven Railroad Technical Info. Assn.?—Carl Leaman, 57 Ludlow Rd., Westport, Conn. 06880.

The Griffenfeld cinder catcher (proper name was Griffenfeld spark arrestor) was first applied to ten Missouri Pacific 4-8-4's, rebuilt 2-8-4's at their Sedalia shops in 1941. These locos, Nos. 1901-1910, were bought from Lima in 1930. When rebuilt they had practically new boilers, new cast-steel bed frames with integral cylinders, larger drivers, and bigger tenders. Among other changes the smokebox was extended 2½ inches. This spark arrestor was mainly located in the longer smokebox, the only visible portion being a small box on the pilot deck, about 5 or 6 inches square, with piping that led into the smokebox, possibly these were the only MoPac locos to use this device. I understand it was invented in Europe in the late 1920s, but I don't know how many roads used it.—Paul Kendrick, 286 3rd Ave., Newport News, Va. 23606.

Is there a book on the *California Zephyr?* If so, where can I buy it?—Reed Daniels, 45 Valley Drive, Blackfoot, Idaho 83222.

I want info on cars specially equipped or assigned for prisoners or mental incompetents. Federal prisoners were shipped from one pen to another in this fashion. Some states, rather than have them become wards, deported the incompetents to their homes in this style as late as 1960.—Joel Boucher, 3031 Fourth Ave., Council Bluffs, Iowa 50501. (*Ed. note*: Usually such persons traveled in ordinary coaches, sometimes handcuffed.)

I am studying Caprotti poppet valve gear as applied to steam locos. As far as I can gather, some 9 locos were fitted with this gear in 1927-'29. The B&O, Reading, and Espee had two apiece. Pennsy, Santa Fe, and Union Pacific each operated one. When and by whom were these locos built and fitted with the gear? Also, tell me their class and numbers, how they performed in service, whether the gear was ever removed, and dates of withdrawal from service and scrapping. Are photos of any of them available? Such info is sparse on this side of the Atlantic.—Hugh Phillips, 15 Elm Drive, Llanellen, Abergavenny, Mon., England.

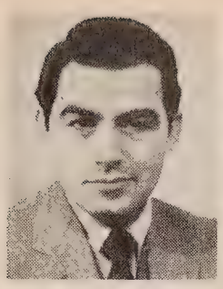
Regarding the RDCs built by Budd probably 20 years ago, are any running today? Would like to know where and some details such as length, hp, speed, and passenger capacity.—Roger McCulloch, 2023 Michigan Ave., LaPorte, Ind. 46350.

What's the rail weight on the Santa Fe mainline from Chicago to Los Angeles and of the Chesapeake & Ohio from Cincinatti to Huntington, W. Va.? Anyone have a picture of the Santa Fe bridge at Fort Madison, Iowa?—J. L. Carter, 4320 W. Ivar Ave., Rosemead, Calif. 91770.

While walking along the Penn Central tracks near Charleroi, Pa., I spotted a tie with the letter "O" stamped on a small plate. What's it for?—Danny Bower, 334 Roley St., Belle Vernon, Pa. 15012.

In 1890 the Bowling Green R.R. purchased the Toledo, Findlay & Springfield. My copy of the Nov. 1893 *Official Guide* lists the line as Toledo, Bowling Green & North Baltimore. Was that an error? I also want info on the Lorain, Ashland & Southern.—Eldon Neff, 1515 Maryland Ave., Springfield, Ohio. ●

Mighty Virginian Railway No. 738, class U5E 2-8-8-2, as seen in May, 1948. Originally built by Alco/Schenectady in 1919 for Norfolk & Western and given the number 2021, she became Santa Fe 1790 in '44 before going to Virginian.
C.W. Jernstrom, 822 Pelham Dr., Ft. Wayne, Ind. 46825



Mike Eagleson

IN SEARCH OF STEAM

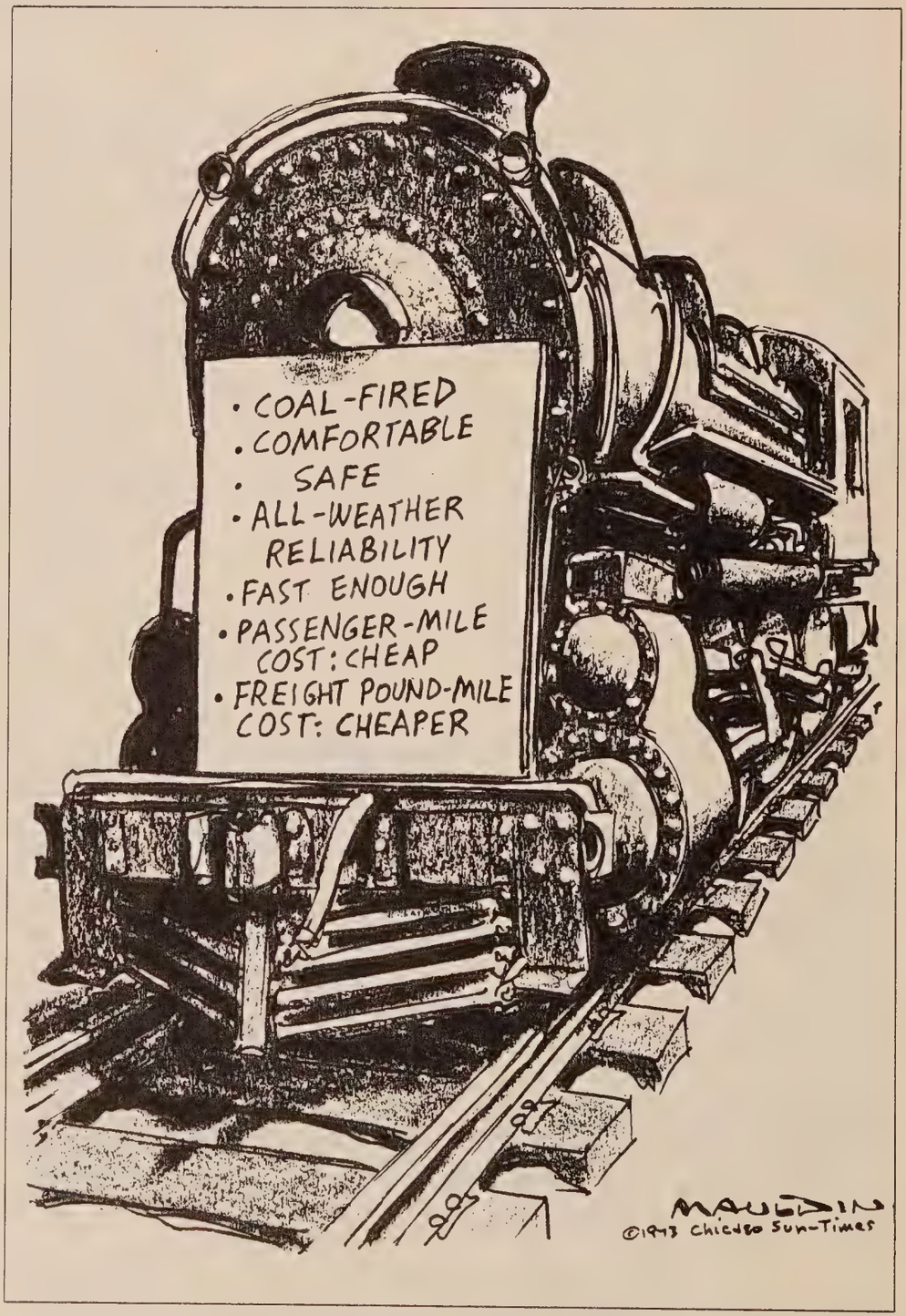
Former Denver & Rio Grande Western rotary OM, built in 1889, operating on Cumbres & Toltec Scenic fantrip, shown at Chama, N.M., Jan. 12, '74.
Jerry B. Day, 7365 E. Severn Place, Denver, Colo. 80220

CUMBRES & Toltec Scenic Railroad ran the unusual trip-of-the-year on January 12th out of Chama, N.M., with Mikado 487 pushing the former Denver & Rio Grande Western rotary snowplow OM out of Chama Yard toward the almost legendary Cumbres Pass. The steam-powered rotary, built in 1889, sent the deep snow flying in spectacular fashion far from the right-of-way, just as it had done decades ago in regular mainline service.

This ancient but still serviceable piece of equipment was made operable by dedicated volunteer members of the Narrow Gauge Railroad Association with the help of C&TS employes working on their own time.

The unique operation was a "first" in the fantrip field and I congratulate the C&TS for pulling it off. Behind the 3-foot-gauge steamer, keen-eyed photographers piled into an open gondola and a heated caboose. The limited accommodations cost $25 each. Instead of being against train-chasers on the highway—hanging sheets over the sides of the engine and notifying state police as some tourist lines have done—this forward-thinking organization merely asked each pacer for a $5 voluntary contribution. Each of the welcomed chasers received a souvenir badge for his support of the trip.

I wish more fantrip operators would promote such enthusiasm instead of alienating themselves from the photographers who follow by automobile. The $5 optional donation per auto could provide a mimeographed "chasing kit" listing photo stops, schedules, and suggested good picture locations. I'm sure that a hundred or so contributions wouldn't hurt any club's ticket sales.



Cartoon from the Chicago *Sun Times*, entitled "What Is Past Is Prologue," a sentence from Shakespeare, shows a belated appreciation of steam power.

THREE 0-6-0 fireless locomotives still work the Union Electric plant at Venice, Illinois, reports Daniel A. Cheragotti, 3960a Brittany Circle, Bridgeton, Missouri, 63044.

BOB JOHNSON, a new owner of the former Grand Trunk Western 4-8-4 No. 6323, class U-3b, has started a program of repairs for the big Northern. The engine has been stored in a roundhouse at Detroit since 1961 and

is currently unavailable for photography or inspection. I sincerely hope that once repairs have been made to this one of the only two remaining examples of GTW 4-8-4's, Bob will be able to run excursions in the steam-starved Midwest. Keep me posted on latest developments.

A RETURN to "coalburning trains" is urged by the conductor of a research project as part of the solution to the energy crisis. Speaking recently at a meeting of the American Society of Mechanical Engineers, Theodore L. Cover said that "a simple, efficient coalburning locomotive would free part of the railway industry from its total dependence on oil."

I would like very much to see this take place and so would most of my readers. But don't kid yourself; it just won't happen. First of all, U.S. railroads have destroyed virtually all of their steam locomotive facilities—roundhouses, coal docks, water towers, and back shops. Nearly all of the men who knew how to repair steam are either retired or dead. All of the "big three" who built steam—Baldwin, American, and Lima—have gone out of business. Not a single construction company in the United States has the special type of heavy equipment or knowledgeable labor necessary to design and build simple, efficient, coal-burning austerity steam power. Not even a Pennsy K-4 Pacific, designed in 1914, could be built today —except for individual hand-made jobs, built as a labor of love, similar to today's small live steamers, constructed in basements or barns over a period of several years. And the cost of the full size counterpart would run up to several million dollars for a single unit!

No, it just won't happen. General Motors, the oil companies, the manufacturers of tires, the American Automobile Associations and the anti-soot-and-cinders ecologists would exert irresistible pressure to prevent the return to steam, regardless of how practical a coalburning locomotive would be in this crisis. And if you think that the 1500 or so preserved locomotives rusting and rotting away in the U.S. might be used, forget it. The only way whereby coal might power trains of the future is by generating electricity in faraway power plants. Even then the enormous cost of building new equipment and stringing wires would not be practical on heavy traffic lines in the population corridors—some of which are already electrified, besides being bankrupt!

However, there is one way in which the serious international steam photographer could gain from the energy crisis. Coal- and wood-burning steam has been given reprieves of a year or two from the torch in many places throughout the world. Greece has just received ten coalburning U.S.-built 141R class Mikados from France. Thailand will continue using their 1949 Japanese-built woodburning 2-8-2's and 4-6-2's beyond the 1975 elimination date. Coalburning power still lingers in Japan and Taiwan. Rhodesia and South Africa are not foresaking steam so quickly as they had been. And India, now operating 9,000 steamers, has just cancelled a $40 million diesel order, to build another batch of simple steam locomotives in their own shops! Glory, hallelujah!

In these countries and elsewhere in the world the hard-core steam fan can benefit from the present oil shortage. Begin right away to save your money, get time off from work in the form of a regular vacation or otherwise, and visit them before it's too late!

Southern Ry. 2-8-0 No. 732 and 4-6-2 No. 750, hauling a fantrip for the Tennessee Valley Railroad Museum, Oct. 17, 1971, at Rockwood, Tennessee.
Wm. T. Morgan. AG3, OA Div., USS Saratoga, CV-60, FPO New York 09501

NORTHWESTERN OKLAHOMA Railroad is a new industrial shortline operating out of Woodward, Okla., on former Katy tracks. Its President, F. W. Pollock, Jr., P.O. Box 1131, Woodward, Okla. 73801, has in mind starting a steam-powered passenger business and is looking for a small steamer. An engine with 50 or 60 tons on the drivers and a two- or four-wheel leading truck would be ideal. Oil-fired is preferred, but coal also would be considered. Who knows of such a locomotive which is operable or repairable and can be bought or leased?

THE LATEST issue of *Push and Pull*, a quarterly magazine about the Worth Valley Railway in England, which has just come to my desk, devotes most of its 36 pages to steam operations in text and pictures. This journal of the Keighley and Worth Valley Preservation Society (Rt. Rev. E. Treacy, president) is published at Haworth Station, Haworth, Yorkshire, England, and sells at 15 pence a copy.

Mike Eagleson does not work in our office. To save time, send steam mail directly to his home, 37 Edgemere Avenue, Mt. Arlington, N.J. 07856.

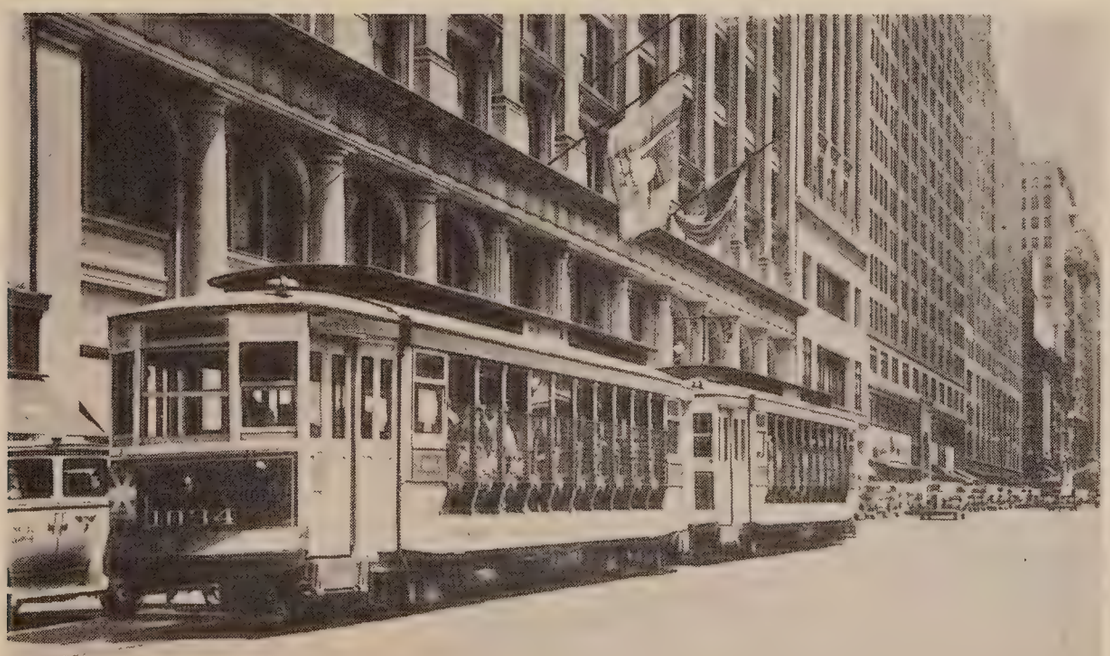
MANY NEW YORKERS RECALL THESE TROLLEYS

From collection of Henry J. Katz, 200 E. 42nd St., New York, N.Y. 10017

Northbound Third Ave. Ry. car 1214 of Webster and White Plains Rd. (W) line reaches northern terminus of White Plains Rd. extension of Lexington Ave. subway, at East 241st Street, Bronx, in about 1937. No. 283, southbound from Mt. Vernon (B line), is shown discharging passengers.

Convertible cars 1079 and 1105 of Third Ave. Railway System passing through Times Square in 1929, with former headed for a turn-around at 42nd St. and 1st Ave., the latter going on up to 191st St. and Broadway. New York Rys. (Green Line) is at right.

Looking westward on 42nd St. from Third Ave. El station about 1941. B line was Broadway having fairly-new "Huffliner" type of car, numbered 551 through 625.



Convertible cars 1034 and 1053 of Third Ave. line on 42nd Street Crosstown (X) route heading west to end of line at W. 42nd St. Weehawken Ferry Terminal in 1940. Note 1939-40 World's Fair flag flying from Stern Bros. department store.

STEVE MAGUIRE'S

TRANSIT TOPICS

HOW MANY readers have ever heard of James Edgar? This man, a native of Scotland, came to the U.S. as a child. He was probably the first department store Santa Claus. Loving children, he would stand on the roof of his department store in Brockton, Mass., on Saturdays and shower pennies down on them. Every 4th of July for about thirty years he chartered trolley cars to take all the available kids in Brockton to a picnic in the rural community of Avon.

A SAN FRANCISCO Muni employe, Richard Morley, age 29, recently spent $250 of his own money to have 6,000 schedules for bus, trolley-bus, and streetcar lines printed because, he says, Muni didn't provide them in order to disguise its poor service. Jack Crowley of the city's Public Utilities Commission commended Morley for his "intelligence, energy, and talent" and advised him to take an exam to qualify for a management job.

NEW YORK'S subway system inadvertently is contributing to the "population explosion." A pregnant woman en route to a hospital recently gave birth to a baby on a bench on a subway station platform. Another woman, a few days later, added to the population while lying on the floor of a partly-filled Manhattan-bound IND subway train in Brooklyn. In the latter case, the mother-to-be hadn't expected her baby so soon and was on her way to Macy's department store, where she worked as a clerical and sales auditor.

THE FIRST trolley cars in Buffalo, N.Y., ran on Main Street on Christmas Eve, 1890 and they lasted nearly sixty years. Many city residents wish they had the non-polluting streetcars back again. One of them, Roy Nagle, a Niagara Frontier historian, recalls the joy of traveling to outings in open trolleys in summer time with well-filled picnic baskets. He quotes these lines from "The Trolley Song," which was popular in gaslight days:

Passengers leaving BTC car 5706 at Catonsville Jct., on Catonsville-Ellicott City line, on last day of trolley operation on a sunny, warm May day in '55.
William E. Warden, Jr., 1216 Shamrock Lane, Waynesboro, Va.

Any girl can be gay in a classy coupe;
In a taxi they all can be jolly;
But the girl worthwhile
Is the one who can smile
When you're taking her home on a trolley.

WE ALL KNOW that the energy problem is bringing demands for the restoration of rail service in many areas, which includes requests for the re-use of abandoned interurban rights-of-way and the addition of passenger service to lightly-used freight lines.

In Portland, Ore., the Public Utility Commission's office announces the results of a study showing the possibility of developing a light rail transit system there. Costing between $30 million and $50 million (about the same as a proposed short expressway) it would provide four different routes from the central part of the city. Three would use abandoned interurban rights-of-way, the now-extinct Portland Traction lines to Oregon City and to Gresham, and the former Southern Pacific electric line as far as Lake Oswego. The fourth route would run along the Union Pacific's original transcontinental line, now used occasionally for freight, with an alternative freight route nearby.

And in San Diego, Calif., planners call for a $1.3 billion light rail system with modern trolleys. It would run south to the Mexican border, El Cajon to the east, from Ocean Beach to San Diego State University, and from Mira Mesa north to Miramar Naval Air Station and downtown San Diego, according to Robert J. Swan, Long Beach, California. Of this route, 22 miles would be underground and the rest on the surface or elevated, in connection with a 700-mile regional feeder bus network.

Down in Texas, a recent story in the *Houston Chronicle,* headlined "Group Is Hoping to Revive Interurban of Yesterday," says the Galveston Chamber of Commerce seeks to restore rail service, abandoned over 35 years ago, between Galveston and Houston. The plan calls for rail diesel cars to run over the now-unused line. A $12,500 feasibility study is under way.

In Los Angeles, which has little or no hope of rapid transit in the near future, the populace is regretting the abandonment of the fine 1000-mile Pacific Electric interurban system that could have been so useful today. Every PE landmark that disappears is noted in the newspapers. For example, when the old station on Venice Blvd. in Culver City was being demolished, a headline in the *L.A. Times* read, "Another Trace of Lamented Red Cars Will be Erased."

MEXICO CITY is extending one of its streetcar lines and plans several other additions to its rail transit system. Now being built is a two-mile prolongation of the Azcapotzalco line along Canal del Norte to the San Juan de Aragon depot. A third extension would join it with the Artes line and go to

Tacuba, connecting with Metro subway route 2. Additional proposals include trackage joining the now-isolated routes to Tlalpan and Xochimilco, a branch line off Calz de Tlalpan to Villa Coapa, an extension from Tlalpan to Villa Olimpica, and rebuilding part of the former Puebla line to San Gregorio, reports Luis Torrealba, Panama 75, Mexico 15, D.F.

SAN FRANCISCO bought eleven PCC cars from the Toronto Transit Commission last December and has since placed them in service. These cars were originally built for Kansas City Public Service and numbered in the 700 series (except one, the 551). When sold to Toronto, they became TTC's 4700 series. San Francisco has renumbered them 1180 to 1190. Here is the renumbering list as appearing in the monthly *Pacific News,* Chatham Publishing Co., P.O. Box 283, Burlingame, Calif. 94010 (80¢ a copy, $8 a year).

In this list are first the KCPS number of each car, then Toronto, and finally SF Muni: (1) 740, 4754, 1180; (2) 754, 4757, 1181; (3) 756, 4758, 1182; (4) 767, 4763, 1183; (5) 769, 4764, 1184; (6) 778, 4769, 1185; (7) 779, 4770, 1186; (8) 780, 4771, 1187; (9) 789, 4775, 1188; (10) 792, 4777, 1189; (11) 551, 4752, 1190.

Also from the West Coast, Ralph Kerchum, 4350 Bridgeview Dr., Oakland, Calif., says the scheduled timetable for Bay Area Rapid Transit (BART) to start running through the Bay tube connecting Oakland with San Francisco is next September first. By November there should be 20-hour daily service, weekdays only. Next January first, the entire system should be operating seven days a week and by July 1, 1975, a three-minute rush-hour schedule on all three lines. However, Ralph warns that BART is likely to be broke again by March, 1975, unless additional financial support is forthcoming.

"YOUR review of O. R. Cummings' history of Berkshire Street Railway last November," writes William Kerr, 11195 San Lucas Dr., Loma Linda, Calif., "reminds me that I lived in the Berkshire territory between 1910 and 1929 and traversed most of its routes. I remember the parlor car (either the *Berkshire Hills* or the *Bennington*) passing through Lee, Mass., with freshly-cut flowers in a vase on the table and with wicker chairs. The 12-mile ride from Lee to Pittsfield cost 35 cents. Cummings failed to mention the big headlight on each car, each with the motorman's name stenciled on it. Every afternoon all headlights would be brought to Pittsfield Park, across from City Hall, from the barn on a work car late in the day and each motorman would place his own headlight on the car front."

EDWIN ALLEN, Master mechanic of the Iowa Terminal Railroad at Mason City, Iowa, left that road in January to take a similar job with Shaker Heights Rapid Transit in Ohio. Before going to Iowa he had been with the Chicago, Aurora & Elgin until that line folded up. Along with Ed, one of the ITR's electric locos is scheduled to be sent to SHRT. The loss of his services makes the ITR incapable of restoring two open trolleys it had contracted to rebuild for the Midwest Central at Mt. Pleasant, Iowa. One of these cars, formerly No. 2 of the now-extinct Magee Museum at Bloomsburg, Pa., requires new wheels with railroad-type flanges. The other, also an ex-Rio car, needs complete rebuilding.

DEVOTEES of *Transit Topics* who do not closely scrutinize the rest of *Railroad Magazine* may have missed a short review of a 211-page book, *East Carolina Railway,* subtitled *Route of the Yellow-Hammers,* meaning not the woodpecker of that name but a group of motorized trolley cars acquired from Capital Traction Co., Washington, D.C. These cars, both single- and double-truck types, were bought for passenger service on the line between Hockerton and Tarboro, N.C., which dates back to 1911. Gasoline engines were installed in them at ECR shops. The cars presented an odd sight, bright yellow and brown, with their motorized engine protruding from the front ends. The so-called "Yellow-Hammers" kept running until 1927. The book has some good views of them. It costs $9.75 from W. R. Newton, 309 N. Contentnea St., Farmville, N.C. 27828.

Volunteer crew laying track on right-of-way of abandoned Como-Harriet line in Minneapolis for the trolley-oriented Minnesota Transportation Museum.

A DETAILED report on testing and operating the controversial *Skybus* on the South Park proving grounds of Pittsburgh's Port Authority is now available. Entitled *Transit Expressway Report, Phase II,* this official 200-page book was prepared under contract with PAT, UMTA, and the Pennsylvania Department of Transportation. A PAT news release says it "confirms the overriding conclusion of an earlier report that there appear to be no major technical barriers to designing a commercial Transit Expressway system." Yet a close perusal of the overall evaluation of the switching system for *Skybus* reveals no glowing description of success, only some optimism. A copy of the latest *Transit Expressway* report may be had for $2 from the Port Authority of Allegheny County, Beaver and Island Avenues, Pittsburgh, Pa. 15233.

FANTRIP March 23. First time in years, D-type cars on single-track shuttle between 9th and Ditmas avenues, New York, including day of riding many other subway and el lines. Lv. Whitehall St. (BMT) 10:30 a.m. Fare: adult $9, child $5. Write Electric Railroaders Assn., 145 Greenwich St., New York, N.Y. 10006. (SSE.)

A PENNSYLVANIA law requires compulsory arbitration of disputes involving transit workers when bargaining fails and it outlaws strikes. Even so, for the second time in less than three years, bus and trolley operators of Pittsburgh's Port Authority struck last December.

An earlier strike there in April, 1971, lasted only three days but the latest one continued for ten days. Several hundred contempt citations were served against the idle workers, requiring court appearances, with penalties for engaging in the illegal strike. At that time the Amalgamated Transit Workers Union was being fined $7500 a day for each day the illegal walkout continued. From Jim Carny of Pittsburgh we learn that the walkout was settled by an agreement between the union and PAT for a 32-cent increase over the present base hourly wage of $5.28, plus additional raises totaling 55 cents an hour over the next three years.

Why has Pittsburgh had a history of so many transit strikes? The past 50 years have seen at least six, the worst of which, in 1967, lasted 56 days and cost the transit company $3 million and the 2100 strikers about $1.6 million in pay.

A NEW museum-type tramway has been opened in Beamish Park, eight miles south of Gateshead, England, reports *Modern Tramway,* publication of the Light Railway Transport League, 64 Grove Ave., London WT 3ES, England. The 270-acre park displays a large collection of industrial and architectural museum pieces and is attracting many visitors. Don't miss it if you are ever in that area.

A 34-page illustrated story of vehicles that ran from 1949 until 1967, entitled *Glasgow's Trolleybuses,* by a Mr. Deans, may be had from the Scottish Tramway Museum Society, 25 Vancouver Rd., Glasgow G14, 9HR, Scotland for 45 pence, British currency.

Building a New Subway

SOMETHING BIG is under way beneath Archer Avenue in the Jamaica section of New York City, writes Ann McCallum in the *Long Island Press.* The temporary roadbed of planks and gratings covers a deep cavern that will one day be a link in the new southeastern Queens subway line.

Now only workmen make their way down 52 feet to the floor of the huge concrete-lined hole. But one day commuters will be able to hurry down, in a less hair-raising manner, to two subway lines.

One of those lines will branch off the Queens Boulevard route of the IND and follow the Van Wyck Expressway south to the Archer Avenue tunnel. At 159th Street, the line will turn south and continue to Springfield Boulevard. A second level of tracks in the tunnel will replace the ancient elevated tracks that now cast their shadow over Jamaica Avenue from 127th Street to 168th Street.

The new subway is the first major line to be built in Queens in 40 years and will take until 1980 to complete its five-mile length. The state is contributing $80 million toward its $252 million cost, with the city paying the rest.

Subways are often damp, but in the sandy soil of south Jamaica, water could get to be a problem. Through the section of tunnel, at a height of about four feet, run the pipes of a pumping system to keep ground water from welling into the tunnel.

Without the pumps and the waterproofing, the water could reach a depth of 40 feet in the tunnel in a heavy rain, according to William Wagenstein, a Transit Authority engineer.

Because the tunnel is in sand, and not in rock as is the new Second Avenue line in Manhattan, engineers turned to a construction method relatively new to the city area.

"These are slurry walls," says Wagenstein. "I don't know of any other place in the city that this method has been used except for the World Trade Center."

The method, in use in Europe for 20 years, was employed by an Italian firm that subcontracted to build the walls. It involves digging a trench just big enough for wooden forms and filling the forms with slurry, a suspension of clay in water, to hold the forms in place.

As the concrete is poured in the forms, the slurry is pumped out, so that the forms are never empty after they are sunk in the ground. When the concrete is hard, the space between the walls is excavated by a steam shovel on the street above. The method replaces blasting and shoring and is more practical and safer.

The Roby & Northern

SUPPLEMENTING the Roby & Northern story in our Jan. '74 issue, Rod Varney of the Texas Electric Railroaders Assn., Milam Bldg., San Antonio, Texas 78205, says the R&N's first route was projected 12 miles to the Kansas City, Mexico & Orient line at McCauley instead of a shorter (4½-mile) connection with the Katy because the latter hadn't built into that area at the time.

The McKeen car seen in 1917 lettered for the R&N was originally Sand Springs Ry. No. 1. In 1912 it was purchased by the Rivera Beach & Western and renumbered 101. The RB&W gave up service in 1916 after a hurricane. Apparently the car was repainted for the R&N in a deal that fell through. Later it was scrapped in Houston.

Histories of the original steam locos of the Roby & Northern's predecessor, the Estacado & Gulf, and of the R&N 3323 come from rail histories, Gerald M. Best, 511 N. Sierra Dr., Beverly Hills, Calif. 90210, and John B. Allen, 728 S. Locust St., Centralia, Ill. 62801. John owns a complete collection of *Poor's Manuals* dating back to 1881 and *Official Guides* since 1889. Here are details on steam locomotives used in the R&N's early days:

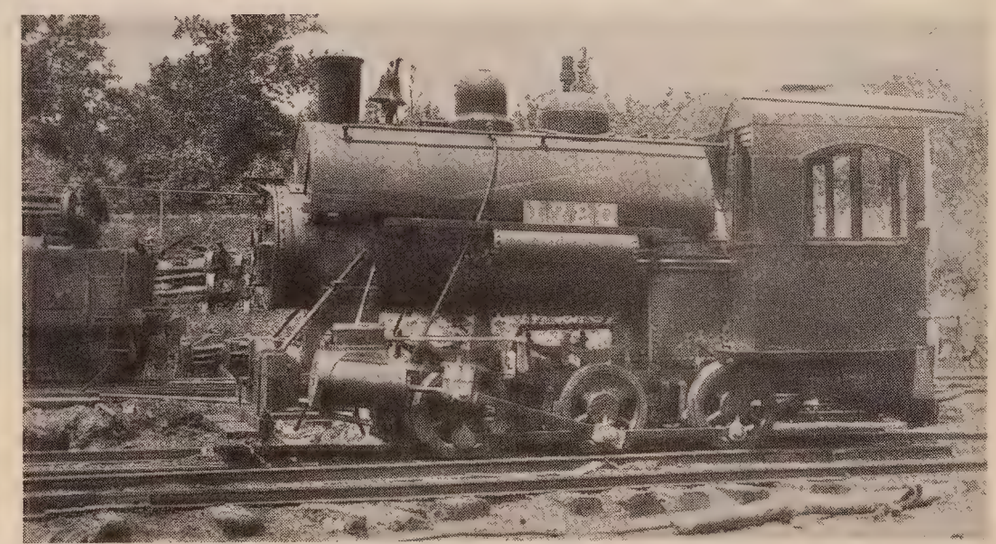
Estacado & Gulf 4-4-0 No. 1051 (Altoona, 9/1886), 18x24" cylinders, ex-PRR 6229, was originally No. 706. She was acquired from the SI&E, where she had been No. 496. The E&G built six miles of track southeast from McCauley toward Roby, then sank into receivership on July 6, 1911. The track and 600 feet of siding at Norman, Texas, were sold to the people of Roby on November 5, 1912, but without the equipment, which presumably went to the creditors. In 1911 the engine vanished without a trace.

Roby & Northern No. 1, a 2-6-0 (Rogers 3429, 12/1883), originally MK&T 144, then 170. R&N acquired her in Nov. 1915 and sold her back to the Katy in Oct. 1916.

Roby & Northern No. 2, a 2-6-0 (Rogers 3425, 12/1883), had the same size drivers and cylinders. She was originally MK&T 141, then 169. The R&N acquired her in October, 1916, and sold her back to the Katy the following April.

R&N 3323, an 0-6-OT (Glover No. 101411, 1912), with 10x14″ drivers, was bought Aug. 15, 1922, from the SI&E, where she had been No. 1720. Originally built for the Hart Lumber Co., she later worked for Denton Lumber Co., then for Edenville Lumber Co., which sold her to the SI&E. In case you wonder about the Glover shop number, that builder's unique practice was to place the serial number after the cylinder dimensions. That Roby & Northern engine was Glover's eleventh 10x14″-cylindered loco. ●

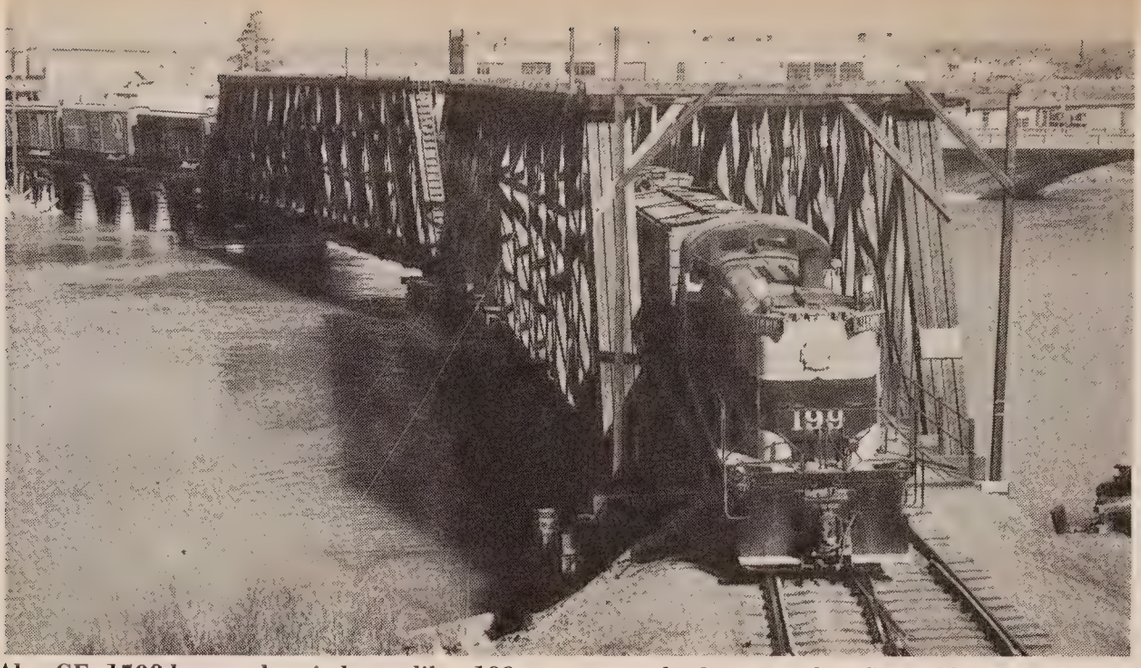
To save time, send *Transit Topics* mail directly to Stephen D. Maguire, P.O. Box 51, Belmar, N.J. 07719.



Rare pictures of steam power that ran on Roby & Northern. Both photos were made in Atlanta, Ga.; the 101 in March '10, and 1720 in Aug. '22.
Collection of Gerald M. Best, 511 N. Sierra Drive, Beverly Hills, Calif. 90210

Jerry Moore, 340 35th., Riviera Beach, Fla. 33404

Interurban cars at Fruitport, Mich., junction of the Grand Rapids, Grand Haven & Muskegon Ry. Roller shade on the arc-type headlight was controlled by a wire running into cab and pulled down to act as dimmer when approaching another car.



Alco-GE 1500-hp road switchers, like 199, were standard power for Great Northern branch-line operations using unusual wooden truss bridge out of Spokane, Wash., in mid-1951.
Philip R. Hastings, 110 Sunset Rd., Waterloo, Iowa 50701

GREAT NORTHERN RAILWAY

Final GN Locomotive Roster, Compiled by Sy Reich

RR. Class	GN Road Numbers	BN Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Effort	Weight	Date	Notes
SW-6	1-6	——	1000	Alco-GE	S2	B-B	62,745	250,980	1950	51
SW-6	7-10	——	1000	Alco-GE	S2	B-B	62,745	250,980	1950	1,51
SW-7	11-13	143-145	1200	GM-EMD	SW7	B-B	63,715	254,860	1950	
SW-7	14-16	146-148	1200	GMD	SW9	B-B	62,095	248,380	1950	
SW-7	17-23	149-155	1200	GM-EMD	SW9	B-B	61,925	247,700	1951	
SW-8	24-28	——	1200	BLHW	S-12	B-B	59,950	239,800	1953	2,49,51
SW-9	29-33	162-166	1200	GM-EMD	SW1200	B-B	62,040	248,160	1957	
——	50-51	——	360	GE	45-ton	B-B	22,278	89,112	1940	3
SW-1	75-76	——	600	GM-EMC	SW1	B-B	50,683	202,730	1939	4
SW-1	77-79	77,——,——	600	GM-EMD	SW1	B-B	50,683	202,730	1941	5
SW-1	80-83	80-83	600	GM-EMD	SW1	B-B	49,780	199,120	1950	
SW-2	98-99	98-99	800	GM-EMD	SW8	B-B	58,125	232,500	1951	
——	100	106	900	GM-EMC	NW	B-B	62,355	249,420	1938	6
——	101	101	900	GM-EMC	NW1	B-B	58,110	232,440	1938	7
SW-4	102-111	450-458,—	1000	GM-EMC	NW2	B-B	62,690	250,760	1939	8
SW-4	112-123	459-470	1000	GM-EMC	NW2	B-B	62,690	250,760	1939	8
SW-4	124-131	471-478	1000	GM-EMD	NW2	B-B	62,690	250,760	1941	8
SW-5	132-133	——	1000	Baldwin	VO 1000	B-B	59,945	239,780	1941	9
SW-4	134-136	479-481	1000	GM-EMD	NW2	B-B	62,690	250,760	1942	10
SW-5	137	——	1000	Baldwin	VO 1000	B-B	60,275	241,100	1943	11
SW-5	138	——	1000	Baldwin	VO 1000	B-B	60,275	241,100	1943	12
SW-5	139-144	——	1000	Baldwin	VO 1000	B-B	60,275	241,100	1944	13
SW-4	145-150	482-487	1000	GM-EMD	NW2	B-B	62,680	250,720	1945	
SW-4	151-162	488-499	1000	GM-EMD	NW2	B-B	61,870	247,480	1949	
SW-7	163-170	135-170	1200	GM-EMD	SW7	B-B	61,965	247,860	1950	
RS-1	175-176	——	1000	GM-EMC	NW3	B-B	53,500	214,000	1939	14
RS-1	177	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1940	14
RS-1	178	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1941	14
RS-1	179	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1941	14
RS-1	180-181	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1942	14
RS-3	182-184	——	1000	Alco-GE	RS-1	B-B	61,250	245,000	1944	15
RS-3	185	——	1000	Alco-GE	RS-1	B-B	61,250	245,000	1944	15
RS-2	186-195	986-995	1000	GM-EMD	NW5	B-B	54,230	216,920	1946	
RS-5	197-199	——	1600	Alco-GE	RS-3	B-B	65,100	260,400	1950	16
RS-4	200-203 (1st)	——	1500	Alco-GE	RS-2	B-B	58,450	233,800	1947	16,53
RS-4	204 (1st)	——	1500	Alco-GE	RS-2	B-B	61,000	244,000	1947	53
RS-4	205-207 (1st)	——	1500	Alco-GE	RS-2	B-B	61,000	244,000	1947	53
RS-4	208-209 (1st), 210-211	——	1500	Alco-GE	RS-2	B-B	62,095	248,380	1949	53
RS-4	212-214	——	1500	Alco-GE	RS-2	B-B	62,095	248,380	1949	53
RS-4	215-217	——	1500	Alco-GE	RS-2	B-B	62,095	248,380	1949	53
RS-4	218-219	——	1500	Alco-GE	RS-2	B-B	61,960	247,840	1950	53
RS-5	220-224, 225-227 (2nd)	——	1600	Alco-GE	RS-3	B-B	65,100	260,400	1950	16,53
RS-5	228-231 (2nd), 232	——	1600	Alco-GE	RS-3	B-B	62,475	249,900	1953	16,53
SW-1500	200-209 (2nd)	300-309	1500	GM-EMD	SW1500	B-B	64,750	259,000	1967	
SDP-40	320-325	9850-9855	3000	GM-EMD	SDP40	C-C	91,895	367,580	1966	29
SDP-45	326-333	9856-9863	3600	GM-EMD	SDP45	C-C	98,335	393,340	1967	
SD-45	400-407	6430-6437	3600	GM-EMD	SD45	C-C	91,990	367,960	1966	29
SD-45	408-417	6438-6447	3600	GM-EMD	SD45	C-C	91,050	364,200	1967	
SD-45	418-426	6448-6456	3600	GM-EMD	SD45	C-C	95,150	380,600	1968	
F-45	427-432	6600-6605	3600	GM-EMD	F45	C-C	96,325	385,300	1969	
F-45	433-440	6606-6613	3600	GM-EMD	F45	C-C	96,100	384,400	1969	
E-7	500A-504A	——	2000	GM-EMD	E7A	A1A-A1A	57,235	339,700	1945	17
E-7	500B-504B (1st)	——	2000	GM-EMD	E7A	A1A-A1A	57,235	339,700	1945	17
E-7	500C-504C	——	2000	GM-EMD	E7A	A1A-A1A	57,235	339,700	1945	17
E-7	500-509	9901-9904, ——,9905-9906,——, ——,9907	2000	GM-EMD	E7A	A1A-A1A	57,235	339,700	1945	17
E-7	510-512	9908-9910	2000	GM-EMD	E7A	A1A-A1A	57,100	338,900	1947	18
SD-7	550-564	6000-6014	1500	GM-EMD	SD7	C-C	85,875	343,500	1952	
SD-7	565-572	6015-6022	1500	GM-EMD	SD7	C-C	85,930	343,720	1953	
SD-9	573-578	6100-6105	1750	GM-EMD	SD9	C-C	85,740	342,960	1954	

SD-9	579-583	6106-6110	1750	GM-EMD	SD9	C-C	86,160	344,640	1956	
SD-9	584-589	6111-6116	1750	GM-EMD	SD9	C-C	86,420	345,680	1957	
SD-9	590-597	6117-6124	1750	GM-EMD	SD9	C-C	85,990	343,960	1958	
SD-9	598-599	6125-6126	1750	GM-EMD	SD9	C-C	86,490	345,960	1958	
GP-7	600-605	1500-1505	1500	GM-EMD	GP7	B-B	61,910	247,640	1950	
GP-7	606-622	1506-1522	1500	GM-EMD	GP7	B-B	61,815	247,260	1950	
GP-7	623-649	1523-1549	1500	GM-EMD	GP7	B-B	61,815	247,260	1951	
GP-7	650-652	1550-1552	1500	GM-EMD	GP7	B-B	62,325	249,300	1951	
GP-7	653-655	1553-1555	1500	GM-EMD	GP7	B-B	61,705	246,820	1953	
GP-9	656-678	1808-1830	1750	GM-EMD	GP9	B-B	61,619	246,475	1954	31
GP-9	679-680	1831-1832	1750	GM-EMD	GP9	B-B	64,000	256,000	1954	
GP-9	681-687	1833-1839	1750	GM-EMD	GP9	B-B	63,300	253,200	1956	
GP-9	688-699	1761-1772	1750	GM-EMD	GP9	B-B	63,285	253,140	1957	
GP-9	700-703	1773-1776	1750	GM-EMD	GP9	B-B	63,210	252,840	1955	
GP-9	704-709	1777-1782	1750	GM-EMD	GP9	B-B	62,970	251,880	1956	
GP-9	710-711	1783-1784	1750	GM-EMD	GP9	B-B	62,970	251,880	1956	
GP-9	712-722	1785-1795	1750	GM-EMD	GP9	B-B	62,690	250,760	1957	
GP-9	723-727	1796-1800	1750	GM-EMD	GP9	B-B	63,090	252,360	1957-8	19
GP-9	728-732	1801-1805	1750	GM-EMD	GP9	B-B	62,750	251,000	1958	
GP-9	733-734	1806-1807	1750	GM-EMD	GP9	B-B	62,900	251,600	1959	20
GP-5	900-903	1350-1353	1350	GM-EMD	GP9	B-B	59,950	239,800	1958	21
GP-5	904-915	1354-1365	1350	GM-EMD	GP9	B-B	60,450	241,800	1959	21
GP-20	2000-2011	2000-2011	2000	GM-EMD	GP20	B-B	64,050	256,200	1960	22
GP-20	2012-2017	2012-2017	2000	GM-EMD	GP20	B-B	63,300	253,200	1960	22
GP-20	2018-2035	2018-2035	2000	GM-EMD	GP20	B-B	63,775	255,100	1960	22
U-25-B	2500-2506	5400-5406	2500	GE	U25B	B-B	67,380	269,520	1964	23
U-25-B	2507-2508	5407-5408	2500	GE	U25B	B-B	67,115	268,460	1964	23
U-25-B	2509-2523	5409-5423	2500	GE	U25B	B-B	66,785	267,140	1965	24
U-28-B	2524-2529	5460-5465	2800	GE	U28B	B-B	68,525	274,100	1966	25
U-33-C	2530-2538	5700-5708	3300	GE	U33C	C-C	96,825	387,300	1968	
U-33-C	2539-2544	5709-5714	3300	GE	U33C	C-C	96,100	384,400	1969	
GP-30	3000-3016	2200 2216	2250	GM-EMD	GP30	B-B	65,180	260,720	1963	26
GP-35	3017-3025	2500-2508	2500	GM-EMD	GP35	B-B	65,060	260,240	1964	27
GP-35	3026-3040	2509-2523	2500	GM-EMD	GP35	B-B	64,980	259,920	1965	28
——	5100	——	600	AGEIR	——	B-B	53,000	212,000	1926	52
——	5101 (1st)	——	900	GM-EMC	NW	B-B	62,355	249,420	1938	6
——	5102 (1st)	——	900	GM-EMC	NW1	B-B	58,110	232,440	1938	7
——	5101-5102 (2nd)	——	600	GM-EMC	SW1	B-B	50,683	202,730	1939	4
——	5103-5105	——	600	GM-EMD	SW1	B-B	50,683	202,730	1941	5
——	5200-5201	——	360	GE	45-ton	B-B	22,278	89,112	1940	3
——	5300	——	900	GM-EMC	NW	B-B	62,355	249,420	1938	6
——	5301	——	900	GM-EMC	NW1	B-B	58,110	232,440	1938	7
——	5302-5311	——	1000	GM-EMC	NW2	B-B	62,690	250,760	1939	8
——	5312-5323	——	1000	GM-EMC	NW2	B-B	62,690	250,760	1939	8
——	5324-5331	——	1000	GM-EMD	NW2	B-B	62,690	250,760	1941	8
——	5332-5333	——	1000	Baldwin	VO 1000	B-B	59,945	239,780	1941	9
——	5334-5336	——	1000	GM-EMD	NW2	B-B	62,690	250,760	1942	10
——	5337	——	1000	Baldwin	VO 1000	B-B	60.275	241,100	1943	11
——	5338	——	1000	Baldwin	VO 1000	B-B	60,275	241,100	1943	12
——	5400-5401	——	1000	GM-EMC	NW3	B-B	53,500	214,000	1939	14
——	5402	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1940	14
——	5403	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1941	14
——	5404	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1941	14
——	5405-5406	——	1000	GM-EMD	NW3	B-B	53,500	214,000	1942	14

Original Numbers of Freight-Type Road Diesels

Railroad Class	Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Effort	Weight	Date	Notes
P-3-7-B	225-227 (1st)	1500	GM-EMD	F5A	B-B	63,525	254,100	1947	
P-3-7-AB	228-231 (1st)	1500	GM-EMD	F5A	B-B	63,525	254,100	1947	
F-T-AB	252A,B	2750	GM-EMD	(FTA)x(FTB)	Note 36	115,706	462,825	1945	
FTB	254B-255B	1350	GM-EMD	FTB	B-B	57,853	231,412	1945	
FTA	256A-258A	1350	GM-EMD	FTA	B-B	56,350	225,380	1945	
FTB	256B-258B	1350	GM-EMD	FTB	B-B	56,200	224,730	1945	
F-3-7-A	259A,B	3000	GM-EMD	(F3A)x(F3A)	Note 36	117,265	469,060	1947	
F-3-7-AB	260A,B-261A,B	3000	GM-EMD	(F5A)x(F5B)	Note 36	123,875	495,500	1947	
F-3-7-A	262A,B-263A,B	3000	GM-EMD	(F3A)x(F3A)	Note 36	115,250	461,000	1947	
F-3-7-A	264A,B	3000	GM-EMD	(F5A)x(F5A)	Note 36	115,250	461,000	1948	
F-3-7-A	265A,B	3000	GM-EMD	(F5A)x(F5A)	Note 36	115,250	461,000	1948	
P-3-7-AB	266A,B-267A,B	3000	GM-EMD	(F5A)x(F5B)	Note 36	123,875	495,500	1948	
P-3-7-AB	268A,B-270A,B	3000	GM-EMD	(F7A)x(F7B)	Note 36	124,335	497,340	1950	
F-3-7-A	271A,B	3000	GM-EMD	(F7A)x(F7A)	Note 36	120,945	483,780	1952	
F-3-7-A	272A,B	3000	GM-EMD	(F7A)x(F7A)	Note 36	120,945	483,780	1949	53
F-3-7-A	273A,B-274A,B	3000	GM-EMD	(F7A)x(F7A)	Note 36	121,400	485,600	1950	
A-F-A	276A,B (1st)	3200	Alco-GE	(FA-2)x(FA-2)	Note 36	125,220	500,880	1950	
A-F-A	277A,B	3200	Alco-GE	(FA-2)x(FA-2)	Note 36	128,900	515,600	1950	
A-F-AB	278A,B-279A,B	3200	Alco-GE	(FA-2)x(FB-2)	Note 36	128,900	515,600	1950	32
P-3-7-AB	280A,B-281A,B	3000	GM-EMD	(F7A)x(F7B)	Note 36	125,870	503,480	1952	
FTA	300A,C (2nd)	1350	GM-EMD	FTA	B-B	58,135	232,540	1945	
F-T-AB	301A,B,C-305A,B,C	4050	GM-EMD	Note 39	Note 37	171,933	687,735	1945	
F-3-7-AB	306A,B,C	4500	GM-EMD	Note 40	Note 37	172,755	691,020	1948	
F-3-7-AB	307A,B,C-309A,B,C	4500	GM-EMD	Note 41	Note 37	181,825	727,300	1950	
A-F-AB	310A,B,C	4800	Alco-GE	Note 42	Note 37	187,305	749,220	1950	
F-3-7-AB	311A,B,C-317A,B,C	4500	GM-EMD	Note 41	Note 37	185,170	740,680	1952	
P-3-7-AB	350A,B,C-358A,B,C	4500	GM-EMD	Note 40	Note 37	185,400	741,600	1947	
P-3-7-AB	363A,C	4500	GM-EMD	Note 41	Note 37	187,765	751,060	1950	33
P-3-7-AB	364A,B,C-365A,B,C	4500	GM-EMD	Note 41	Note 37	187,925	751,700	1950	
P-3-7-A	375C-376C	1500	GM-EMD	F3A	B-B	58,135	232,540	1948	33
F-T-AB	400A,B,C,D	5400	GM-EMD	Note 43	Note 38	231,412	925,650	1943	
F-T-AB	402A,B,C,D,404A,B,C,D	5400	GM-EMD	Note 43	Note 38	231,412	925,650	1944	
F-T-AB	406A,B,C,D,408A,B,C,D, 410A,B,C,D	5400	GM-EMD	Note 43	Note 38	231,412	925,650	1944	
F-T-AB	412A,B,C,D,424A,B,C,D Even numbers only	5400	GM-EMD	Note 43	Note 38	231,412	925,650	1944	
F-T-AB	426A,B,C,D,428A,B,C,D	5400	GM-EMD	Note 43	Note 38	231,412	925,650	1945	
F-3-7-AB	430A,B,C,D-438A,B,C,D Even numbers only	6000	GM-EMD	Note 44	Note 38	229,385	917,450	1948	34
A-F-AB	440A,B,C,D	6000	Alco-GE	Note 45	Note 38	249,000	996,000	1948	35
A-F-AB	442A,B,C,D	6000	Alco-GE	Note 45	Note 38	249,000	996,000	1949	35
F-3-7-AB	444A,B,C,D,446A,B,C,D	6000	GM-EMD	Note 46	Note 38	234,425	937,700	1949	
F-3-7-AB	448A,B,C,D-456A,B,C,D Even numbers only	6000	GM-EMD	Note 46	Note 38	234,425	937,700	1950	
F-3-7-AB	458C	1500	GM-EMD	F7B	B-B	57,585	230,340	1952	
F-3-7-AB	460A,B	3000	GM-EMD	(F7A)x(F7B)	Note 36	123,700	494,800	1952	
F-3-7-AB	462A,B,C,D,464A,B,C,D	6000	GM-EMD	Note 46	Note 38	246,125	984,660	1953	
F-3-7-AB	466A,B,C,D,468A,B,C,D	6000	GM-EMD	Note 46	Note 38	246,125	984,660	1953	
F9	470B,C,472B,C-474B,C	3500	GM-EMD	(F9B)x(F9B)	Note 36	118,900	475,600	1954	
F-3-7-AB	500B-504B (2nd)	1500	GM-EMD	F7B	B-B	57,585	230,340	1950	
F-T-AB	5600 A,B	2700	GM-EMD	(FTA)x(FTB)	Note 36	113,000	452,000	1941	
F-T-AB	5700A,B,5701A,B	2700	GM-EMD	(FTA)x(FTB)	Note 36	114,595	458,380	1941	
F-T-AB	5900A,B,C	4050	GM-EMD	Note 39	Note 37	165,757	663,050	1941	

Freight-Type Road Diesel Renumbering and Disposition

Road Numbers	Other Road Numbers	Disposition
200A,B	Originally 5600A,B, then 200A,B, then 253A,B	
225-226 (1st)	Renumbered 359A,C	
227 (1st)	Renumbered 275A (1st), then 366C	
228-231 (1st)	Renumbered 360A,C-361A,C	
247A,B	Originally 304A,C	To EMD 1964
248A,B	Originally 305A,B	2022; To EMD 1963
249A	Originally 300A (2nd)	2035
249B	Originally 5900A, then 300A (1st), then 254A, then 249B	900
250A, B-251A,B	Originally 5700A,B-5701A,B then 250A,B-251A,B, then 375A,B-376A,B, then 250A,B- 251A,B	724, 723, 725-726
252A,B	Renumbered 418A,B (2nd)	
253A,B	Originally 5600A,B, then 200A,B, then 253A,B	901-902
254A	Originally 5900A, then 300A (1st), then 254A, then 249B	
254B	Renumbered 418C (2nd)	
255A	Originally 5900B, then 300B (1st), then 255A	903
255B		2025
256A, B-259A,B		To EMD 1964-5
260A, B-261A,B	Renumbered 366A,B-367A,B	
262A, B-263A,B		To EMD 1967-8
264A, B-265A,B	Renumbered 470A,D, 472A,D	
266A, B-268A,B	Renumbered 366A,B-370A,B; 369A then 276B (2nd)	
269A-270A	Renumbered 367C-368C	
269B-270B	Renumbered 371B-372B	
271A,B		BN 600, 602
272A,B	Renumbered 474A,D	
273A, B-274A,B		BN 604, 606, 608, 610
275A (1st)	Originally 227 (1st), then 275A then 366C	
275A (2nd), 275B	Originally 356A-357A	BN 612, 614
276A,B (1st)		To GE 1968
276A (2nd)	Originally 365C	BN 616
276B (2nd)	Originally 267A, then 369A, then 276B (2nd)	BN 618
277A, B-279A,B		To GE 1966, 1968, 1968, 1966, 1968, 1966
280A, B-281A,B	Renumbered 369C, 373B, 370C, 374B	
300A,C (1st)	Originally 5900A, C, then 300A, C (1st), then 254A, 300B (2nd), then 249B, 401C	
300A,C (2nd)	Renumbered 249A, 418D (2nd)	
300B (1st)	Originally 5900B, then 300B (1st), then 255A	
300B (2nd)	Originally 5900C, then 300C (1st), then 300B (2nd), then 401C	
301A,B,C-303 A,B,C	Renumbered 401A,B,D, 403A, B,D, 405A,B,D	
304A-C-305A,C	Renumbered 247A,B-248A,B	
304B-305B	Renumbered 403C, 405C	
306A,B,C	Renumbered 458A,B,D	
307A,B,C-309A,B,C		BN 620-622, 624-626, 628-630
310A,B,C		To GE 1966
311A,C-317A,C		BN 632-658 even only
311B-317B		BN 633, 637, 641, 645, 649, 653, 657
350A-355A		To EMD 1966, 1966; wrecked 1966; to EMD 1967, 1966, 1965
356A-357A	Renumbered 275A (2nd), 275B	
358A		To EMD 1969
350B-353B		BN 9701, 9703, 9705, 9707
354B		Heater car 10
355B		To GE 1969
356B		9711
357B		To EMD 1965
358B		9713
350C		To GE 1966
351C-353C		To EMD 1967
354C		To EMD 1966
355C-356C		To EMD 1967
357C		To EMD 1965
358C		BN 9708
359A, C-362 A,C	Originally 225-226 (1st); 228-231 (1st); 375C-376C	To EMD 1966; BN9710, 9712; to EMD 1967; BN 9714, 9716; to GE 1967; to EMD 1969
363A,C		To GE 1969; BN 9724
359B-363B	Originally 500B-504B (2nd)	To EMD 1969; BN 9717, 9719; to EMD 1966; BN 9721
364A,C,365A		BN 9726, 9728; to EMD 1968
365C	Renumbered 276A (2nd)	
364B-365B		BN 9723, 9725
366A,C-368 A,C	Originally 260A, 275A (1st), 261A,269A,266A,270A	BN 9732; to EMD 1967; to GE 1969; BN 9736; to EMD 1966, 1966
369A	Originally 267A, then 369A, then 276B (2nd)	
369C, 370A,C	Originally 280A,268A,281A	BN 9740, 9742, 9744
366B-374B	Originally 260B-261B,266B-270B,280B-281B	To EMD 1968; to GE 1969; BN 9729, 9733, 9735, 9737, 9739, 9741, 9743
375A,B- 376A,B	Originally 5700A,B-5701A,B, then 250A,B-251A,B, then 375A, B-376A,B, then 250A,B- 251A,B	
375C-376C	Renumbered 362A,C	BN 9709, 9727,
380B, 382B-385B	Originally 460B,462B,C,464B,C	9745, 9747, 9749
400A,B,C,D		2027, 904, 905, 2028
401A,B,D	Originally 301A,B,C	To EMD 1963, 1963, 1972
401C	Originally 5900C, then 300C (1st), then 300B (2nd), then 401C	727
402A,B,C,D		2000-2003
403A,B,C,D	Originally 302A,B,304B,302C	2029, 2020; to EMD 1965, 1965
404A,B,C,D		2004-2007
405A,B,C,D	Originally 303A,B,305B,303C	2030; to EMD 1963; 2031-2032
406A,B,C,D		2008-2011
408A,B,C,D		To EMD 1963; 2012-2014
410A,B,C,D		To EMD 1965; 906-907, 2033
412A,B,C,D		To EMD 1963; 908; to EMD 1965; 2018
414A,B,C,D		2023, 909-910, 2024
416A,B,C,D		2015-2917; to EMD 1964
418A,B (1st)		Scrapped
418C,D (1st)	Renumbered 460C,D	
418A,B,C,D (2nd)	Originally 252A,B,300C (2nd), 254B	To EMD 1963; 911, 2021; to EMD 1965
420A,B,C,D		To EMD 1963-4
422A,B,C,D		To EMD 1963; 912-913; to EMD 1963
424A,B,C,D		To EMD 1963, 1963; 914; to EMD 1963
426A,B,C,D		To EMD 1963, 1963; 915, 2019
428A,B,C,D		2034; to EMD 1963, 1963, 1965
430A,B,C,D		Retired 1967; heater cars 14, 12; to EMD 1966
432A,B,C,D		To EMD 1966; heater car 13; 733-734
434A,B,C,D		To EMD 1966; heater car 11; to EMD 1966, 1967
436A,B,C,D		To EMD 1967; heater cars 17, 15; to EMD 1968
440A,B,C,D, 442A,B,C,D		SP&S 862, 206, 207, 863-864, 208-209, 865
444A,B,C,D		To EMD 1967; ARR 1509; ARR 1501 (2nd); to GE 1969
446A,B,C,D		ARR 1518; slave 2; to EMD
448A,B,C,D		BN 660-661, 663, 662
450A,B,C,D		To EMD 1968; ARR 1515, 1511; to EMD 1969
452A,B,C,D		BN 664; to EMD 1969; BN 665-666
454A,B,C,D		BN 668-669, 671, 670
456A,B,C,D		To EMD 1969; BN 673, 675, 674
458A,B,D	Originally 306A,B,C	BN 676; heater car 16; BN 678
458C		BN 677
460A		To EMD 1969
460B	Renumbered 380B	
462A,D	Originally 418C,D (1st)	BN 679-680
460C,D		To EMD 1968; BN 682
462B,C	Renumbered 382B-383B	
464A,D		BN 684, 686
464B,C	Renumbered 384B-385B	
466A,B,C,D		BN 688, 687, 689, 690
468A,B,C,D		BN 692, 691, 693, 694
470A,D, 472A, D, 474A,D	Originally 264A,B-265A,B, 272A,B	To EMD 1967; BN 696; to EMD 1964, 1969; BN 698, 700
470B,C, 472B, C, 474B,C		BN 845; heater car 18; BN 847, 849, 851, 853
500B-504B (2nd)	Renumbered 359B-363B	
5600A,B	Renumbered 200A,B, then 253A,B	
5700A,B-5701A,B	Renumbered 250A,B-251A,B, then 375A,B-376A,B, then 250A,B-251A,B	
5900A,B,C	Renumbered 300A (1st), 300B (1st), 300C (1st), then 254A-255A,300B (2nd); 254A then 249B; 300B (2nd) then 401C	

Elevated concrete platforms provide working areas at the same level as locomotive floors in what used to be the Great Northern's diesel shop at Havre, Mont. Use of steel column supports beneath pit rails makes easy access to the pits.
Burlington Northern Photograph

Great Northern Notes

Roster is based on data from BN's mechanical dept., Port of Portland's equipment superintendent, Northern Indiana Public Service's traffic agent; The Anaconda Company's office supervisor, Anaconda Aluminum's gen. auditing suprv., L&N's public relations dept., SJ&LC's vice pres. & gen. manager, Armco Steel's buyer; ARR's gen. manager, Paper, Calmenson's staff, and Precision National's traffic manager. It is accurate as of the third quarter, 1973.

Locomotive builders: Alco-GE, American Locomotive Co.-General Electric Co.; GM-EMD or EMD, General Motors-Electro Motive Div.; GMD, General Motors Diesel Ltd.; BLHW, Baldwin-Lima-Hamilton-Westinghouse; GM-EMC, General Motors-Electro Motive Corp.; GE, General Electric Co.; AGEIR, Alco-General Electric-Ingersoll Rand. ARR means Alaska Railroad. Weight and tractive effort in pounds.

(1) 10 scrapped (3/2/67).
(2) 25 scrapped (3/2/67).
(3) 5200-5201 renumbered 50-51. 50 was sold to Donovan, Lovering & Boyle Construction Co., renumbered 50 (11/51); then to Morse Bros. Machinery, renumbered 50; then to Craig Mountain Ry., renumbered 50; then to Roseburg Lumber Co., renumbered ?, then to Port of Portland, renumbered 402. No. 51 was sold to Iron & Steel Products, renumbered 440; then to A.J. King Lumber Co., renumbered 440.
(4) 5101-5102 (2nd) were renumbered 75-76. Unit 75 was sold to Truax-Traer Coal Co. but not numbered; scrapped in 1961. Unit 76 was sold to Northern Indiana Public Service, renumbered MF27.
(5) 5103-5105 renumbered 77-79. No. 78 was sold to Northern Indiana Public Service, renumbered MF12. No. 79 was sold to Truax-Traer Coal Co., where it received no number (9/10/63).
(6) 5101 (1st) renumbered 5300, then 100. Rebuilt by GM-EMD in 1955 to an SW1200 with 1200 hp, classed SW-4. Weight and tractive effort shown are as rebuilt.
(7) 5102 (1st) renumbered 5301, then 101. Rebuilt by GM-EMD in 1953 to an SW8 with 800 hp, classed SW-2. Weight and tractive effort shown are as rebuilt.
(8) 5302-5331 renumbered 102-131. No. 111 was sold to The Anaconda Co., renumbered 100 (4/61), then renumbered U926.
(9) 5332-5333 renumbered 132-133. Nos. 132-133 were sold to Paper, Calmenson and scrapped (7/60, 8/63).
(10) 5334-5336 renumbered 134-136.
(11) 5337 renumbered 137. Converted to caboose X-180 (8/4/64), then renumbered X-325. If repainted, it will become BN 11471.
(12) 5338 renumbered 138, converted to transfer caboose X-178 (5/64), then renumbered X-325. If repainted, it will become BN 11472.
(13) 139 was scrapped. 140 was converted to transfer caboose X-179 (5/64), then renumbered X-324. If repainted, it will become BN 11473. No. 141 was sold to Paper, Calmenson (8/19/63) and scrapped. 142 was converted to transfer caboose X-177 (8/4/64), then renumbered X-322. If repainted, it will become BN 11474. No. 143 was scrapped. 144 was sold to Duluth Iron (8/19/63); scrapped (1963).
(14) 5400-5406 renumbered 175-181. Nos. 175-178 were traded to GM-EMD for GP35's (2-3/65). No. 179 sold to George R. Silcott (6/68), then to A.E. Staley Co. 180 sold to George R. Silcott (6/68), then to Railway Equipment, then to the Clinchfield, renumbered 361. No. 181 sold to Anaconda Aluminum, renumbered 100 (8/30/65).
(15) 182 sold to Western Dominion Coal Mines, renumbered 182 (2/26/60).
(16) 197-199 renumbered 225-227 (2nd). Units 200-201 (1st) were sold to the Spokane, Portland & Seattle, renumbered 63-64 (2/16/63). They were traded to Alco Products in 1965. Ex-SP&S 63 scrapped. Ex-SP&S 64 resold to the Louisville & Nashville, renumbered 104 (2nd); then retired (10/71) and sold to GE. 227 (2nd) was sold to GE, then to Montreal Locomotive Works, then to A.E. Bowen, then to F.C. de Langro, renumbered 1604. No. 203 scrapped (1/16/64). No. 229 sold to George R. Silcott, then to the St. Johnsbury & Lamoille County, renumbered 203. No. 230 sold to Peabody Coal Co., renumbered 230. Nos. 231 (2nd), 232 sold to the SP&S, renumbered 83-84 (4/1/59); then BN 4068-4069.
(17) 500A-504A renumbered 500-501, 504, 506, 508. Nos. 500B-504B (1st) renumbered 500C-504C; then 502-503, 505, 507, 509. No. 504 scrapped. 507 sold to Precision Engineering (3/68) and scrapped. 508 scrapped.
(18) 510A-512A renumbered 510-512.
(19) 723-727 were rebuilt from 250B, A, 251B,A, 401C. Unit 725 was scrapped before the merger, so there never was a BN 1798.
(20) 733-734 rebuilt from 432,C,D,
(21) 900-915 rebuilt from 249B, 253A,B, 255A, 400B, C, 410B,C, 412B, 418B, 422B,C, 424C, 426C.
(22) 2000-2035 rebuilt from 402A,B,C,D, 404A,-B,C,D, 406A,B,C,D, 408B,C,D, 416A,B,C, 412D, 418B, 403B, 418C, 248A, 414A,D, 255B, 401D, 400A,D, 403A, 405A,C,D, 410D, 428A, 249A.
(23) 2500-2508 rebuilt from 202, 204-208 (1st); 210, 223, but not in that order.
(24) 2509-2523 rebuilt from 211-222, 224-226, but not in that order.
(25) 2524-2529 rebuilt from 277A, 278B, 279B, 310A,B,C, but not in that order.
(26) 3000-3016 rebuilt from 248B, 401A,B, 405A, 412A, 418A, 420D, 422A,D, 424A,B,D, 426A,B, 428-C,D, but not in that order.
(27) 3017-3025 rebuilt from 247A,B, 256A, 258B, 416D, 420A,B,C, 427A, but not in that order.
(28) 3026-3040 rebuilt from 175-178, 256B, 257A,-B, 258A, 357C, 403C, 403D, 410A, 412C, 418D, 428B, but not in that order.
(29) 320-325, 400-407 rebuilt from 350A,C, 351A, 354A,C, 357B, 359A, 362B, 368A,C, 430D, 432A, 434A,C, but not in that order.
(30) 408-417 rebuilt from 259A,B, 434D, 436A, 444A, 470A, but not in that order. Additional units were traded in for these and for 326-333.
(31) 675 scrapped before the merger, so there never was a BN 1827.
(32) 278A,B, 279B,A were originally Alco-GE demonstrators 1602A,B,C,D.
(33) 363A,C were formed with 504B to become 363A,B,C.
(34) Great Northern converted 438A,B,C,D to an F5.
(35) 440C, 442B,C sold to the SP&S, renumbered 207-209; then traded to Alco for new SP&S power.
(36) (B-B)x(B-B)
(37) (B-B)x(B-B)x(B-B)
(38) (B-B)x(B-B)x(B-B)x(B-B)
(39) (FTA)x(FTB)x(FTA)
(40) (F5A)x(F5B)x(F5A)
(41) (F7A)x(F7B)x(F7A)
(42) (FA-2)x(FB-2)x(FA-2)
(43) (FTA)x(FTB)x(FTB)x(FTA)
(44) (F3A)x(F3B)x(F3B)x(F3A)
(45) (FA-1)x(FB-1)x(FB-1)x(FA-1)
(46) (F7A)x(F7B)x(F7B)x(F7A)
(47 and 48) Omitted.
(49) 24, 26, 27 sold to Industrial Maintenance Service. Ex-GN 24 sold to Erie Mining Co. and renumbered 7247. (50) Omitted.
(51) 1-9, 28 were traded to GM-EMD (1967).
(52) 5100 sold to Iron & Steel Products (5/42); then to Armco Steel, renumbered E104 (5/42). Scrapped (1955).
(53) These units were sold to GE: 202 (1st) (12/27/63); 204 (1st) (1/6/64); 205 (1st) (12/-27/63); 206 (1st) (1/27/64); 207 (1st) (12/27/63); 208 (1st) (1/31/64); 209 (1st) (1964); 210 (2/4/-64); 211 (3/13/65); 212 (2/23/65); 213 (2/11/65); 214 (3/4/65); 215 (2/26/65); 216 (2/23/65); 217 (3/8/65); 218 (2/5/65); 219 (3/8/65); 220 (2/19/-65); 221 (3/8/65); 222 (2/19/65); 223 (1/14/65); 224 (3/4/65); 225 (2nd) (2/11/65); 226 (2nd) (3/17/65); (3/17/65); 228 (2nd) 1968.

PASSENGER TRAIN SURVEY

SOMEWHERE there must be a junior executive in either the recreational vehicle industry, a tourism promotion bureau, or Amtrak or perhaps another railroad, whose boss has told him to come up with new ideas. "Red" Chapin, a newspaper columnist, would like to propose an idea that he says could help all three industries.

The problems have to do with moving large numbers of people long distances to get to vacation areas. The gas shortage threatens cut-backs, if not an end to use of recreational vehicles and less business for tourist areas. And everybody knows the railroads need help.

Red's idea is a simple one. Transport recreational vehicles and their owners by train to vacation areas! He says he can visualize an "Amtrak Vacation Special," made up of flatcars for the vehicles plus dining cars and coaches for the people, loading up, let's say at Boston. As it travels south more RV's and their vacationing owners board at New York, Philadelphia, etc., headed for Florida and other southern watering spots.

This summer, similar trains could head up into northern vacation areas in Maine, New Hampshire, Vermont, and other New England states. There could be trains to take camping families and their equipment to the Mexican and Canadian borders, or cross country to the U.S. West Coast. The customers would not need gasoline for the trip, only enough to get to the loading area, and from the point of unloading to their campground. Think of the fuel savings!

And there *are* customers. Over four and one-half million travel trailers, truck campers and motor homes are registered in the United States. Another nine to ten million families camp by tent or rent equipment.

CANADIAN NATIONAL is elated with its restored Turbo Train operation between Montreal and Toronto, reports the *Locomotive Engineer*. . . . A research report on passenger traffic in southwestern Ontario, issued by the Canadian Transport Commission, sets out four proposals, two of which involve the revival of some of the passenger-train services that were discontinued in the region nearly four years ago. . . . Alberta Highways Minister Clarence Copithorne says the provincial government is willing to help municipalities finance automatic signal protection at grade crossings. But he has not indicated yet how much of the cost would be paid. Ottawa now pays 80 percent of approved projects. . . . Ottawa has given Ontario $10 million to finance the purchase of equipment for a new GO Train service between Toronto and Richmond Hill. Ontario hopes to have the run in operation by 1976 to serve commuters north of Toronto.

RAILROAD-ORIENTED persons seeking restoration of passenger rail service between Boston, Mass., and Portland, Maine, got little encouragement at a recent meeting. George Gallagher of the Boston & Maine Railroad told the Maine Mid-Coast Route 1 Association and the New Hampshire Association of Railroad Passengers that the 155 miles of track between Boston and Portland are at present suited only for freight service and would have to be upgraded. He added that even if the service were confined to self-propelled cars it would cost $100,000 each to renovate old ones and $500,000 apiece new.

AMTRAK has set up a new, free Red Cap service at major stations, abolishing former charges of 35 to 50 cents for each item of luggage. As with Sky Caps at airports, tips are neither recommended nor prohibited.

AMTRAK recorded a perfect score on its New York-Kansas City route, according to the *Daily News* of Dayton, Ohio: its trains failed to arrive at Dayton on time even once last November. In its operational report, the quasi-public corporation reported that its trains as a whole were on time 63.9 percent of the time in November, down from 65.3 per cent in October. The New York-Kansas City route, one of Amtrak's biggest money losers, dropped from a 4.8 per cent on-time record in October to zero the following month.

The ICC has granted approval to Scenic Railways, Inc., for a public offering of its common stock. This company operates the Cumbres & Toltec Scenic in Colorado and New Mexico. The ICC order permits the sale of 200,000 shares of stock at an offering price of $5 per share.

Robert E. Keller, president of the company, says proceeds from the new stock issue will be used in part to finance badly needed improvements on the C&TS, to buy new passenger cars, and to upgrade the line's other rolling stock. The 64-mile narrow-gage road was formerly the Cumbres Pass line of the D&RGW. Last year it carried over 27,000 passengers between Antonito, Colo., and Chama, N.M. The company is regulated by the ICC because it is a common carrier.

TRAIN CREWS of the Long Island Rail Road are permitted by court order to wear their hair long. Federal Judge Marl Constantino issued this decree in the case of two conductors, Frederick Ammirati, 28, and Al Hoffmann, 32, both of Baldwin, N.Y., who had been suspended from their jobs last August for refusing to cut their hair, thus defying the road's controversial rule J. The court decided: "The record indicates that Rule J has no significant relationship to the safety of either the passengers or employes of the railroad or the efficiency of the conductors."

SAYS Luther S. Miller, editor of *Railway Age*: "Rebirth of the passenger train is not a sudden thing, nor even a recent one. It has been going on quietly for years. Passenger-train cars worth close to $175 million were delivered in 1973; the backlog of new cars on order Jan. 1 was worth around $700 million; some $400 million in orders will be placed in 1974; and another $1.9 billion in orders that will be placed in the next five years.

"The passenger-train car, for so long the ugly duckling in the railway marketplace, is suddenly beginning to look like Cinderella at the ball."

I HATE to see a grown man cry, as many will when they learn that there is scarcely a single free railway coach in the nation to be put back into service. Canada, regretfully, is in almost as bad shape as evidenced last holiday season.

Yes, the New York Central bought 95 coaches (plus those of the *Empire State Express*) just before World War II and about 300 after. Where are

they now? The handful of coaches Amtrak acquired often break down for lack of parts. The simple fact is that there is not enough equipment now to move any growth business.

Meanwhile, the railroads in Europe and Japan that we Americans helped to build with our tax money are expanding passenger service all the time. So they are money-losers! Do we make money on our highways, or do we subsidize riders with concrete? Do air passengers pay all the costs of airports, and control?—William C. Kessel, 99 Center St., Hamburg, N.Y. 14075.

ON THE WALLS of the pressroom in the State Capitol in Albany, N.Y., hangs a framed copy of an article from the March 11, 1882, edition of *Harper's Weekly*. It is about a raucuous incident on the "Legislative Train," so called because it left Albany for New York City in those days at 2:40 p.m. every Friday, filled with "a motley crew of state officials, office-holders, politicians and lobbyists, together with newspapermen and other respectable persons."

"It is the fastest train run over the Hudson River Road," the article said, "making the run in 4 hours and 20 minutes."

But it seems that on the night of Jan. 13, 1882, one of the distinguished passengers opened the air brakes, causing the train to come to a halt. While it was stopped, a freight train slammed into its rear, killing and injuring a number of persons.

"According to the sworn testimony of Hanford, the conductor, the act was done in drunken recklessness by one of the passengers whose connection with the government of the Empire State gives the train its peculiar designation," the *Harper's* article said. In other words, a legislator.

"Every year, on my first trip to Albany," Mike McKeating wrote in the Buffalo *Evening Press*, "I re-read that article with mixed wonder and amusement at the days when legislators, lobbyists could afford the luxury of 4 hours and 20 minutes of drunken revelry on a train trip from Albany to New York.

"Nowadays, you can fly from Albany to virtually anywhere in the state in no more than 50 minutes—air time. But, depending on the weather, you may spend anywhere from an hour to four hours circling airports, taxiing to the end of runways, waiting in terminals, and driving to and from airports."

Down by the Depot

JOHN O'HARA, one of America's top novelists, writes in his best-seller, *Ten North Frederick*: "As in every town, as in nearly every city, the railroad station area became a tough area, infested with thieves and procurers, whores and hoodlums. Gibbsville was like any other American town in that the first impression and the last impression it created was that the traveler would have been safer at home—except that in the traveler's home town conditions were identical with the conditions in Gibbsville. Railroad Avenue was the street of dives; the intersection of Christiana Street and Railroad Avenue was the local capital of crime and violence."

(*Note from Freeman Hubbard*: The toughest railroad station area I ever visited is in Guatemala City, capital of Guatemala. Its central depot is impressively large, reminiscent of better days, but is now badly rundown, has very few trains, and stands in a slum neighborhood. Although several policemen are plainly visible, you don't feel quite safe there, even in broad daylight. But I found the railway employes courteous and helpful.)

Philadelphia sunshine now brightens the dark cloud hanging over Penn Central's 30th Street Station. What we're talking about is dusting, cleaning and painting. Some $33,000 worth. A drop in the bucket, considering that no mop had touched the travertine walls and columns of the station's grand waiting room for 40 years.

Forty years without a bath can leave a place pretty dirty. But that isn't the only one. Some 75 stations across the map are getting similar or more drastic face-lifts.

Boston's South Station, now gradually being razed, used to contain a small chapel for the use of travelers who felt a need for quiet meditation while waiting for trains. Religious services also were held there. When Pennsylvania's 30th Street Station was new, it also had a chapel, which served for meditation and as a secluded spot for mourners who accompanied coffined bodies shipped by mail. However, it didn't last long; the space was soon put to another use.

The Louisville & Nashville recently dedicated a little room in their general office building in Louisville, Ky., as a chapel for moments of meditation. There is a need for such facilities in this fast-paced and degenerating civilization. Upholstered chairs of carved wood seating 12 people have been installed, together with a small altar, subdued lighting, and stained-glass windows, delicately leaded, salvaged from Union Station's now-demolished trainshed. In addition to the chapel, which is open at all times, regular devotional services are held in the builidng's assembly room for 20-minute periods each Wednesday noon.

One of the oldest buildings on the CP Rail System has been demolished, writes Jim Sandilands of *CP Rail News*. The station at Lyndonville, Vt., was built in 1867 as the headquarters of the old Connecticut & Passumpsic Railroad, a rather pleasant two-story example of Victorian era "Railroad Gothic" architecture.

Lyndonville was closed as a train-order office some time before it was razed. CP Rail freights rolled by the red building on their way to St. Johnsbury and Wells River as if it did not exist.

But in its glory days Lyndonville, besides beinng the headquarters, was the site of the road's shops and a bustling roundhouse. Locomotives were built and maintained there; repairs were made to motive power and rolling stock right up until the early 1950s.

The red brick station, now only a pile of rubble, was once a place where people came to board wooden open-platformed coaches pulled by wood-burning 4-4-0s. It was a place where railway men were hired and fired.

Fran White was determined that the old Union Railroad depot at Aberdeen, Wash., would not be demolished, so she did about the only thing possible to assure its survival. The Aberdeen city councilwoman and president of the Grays Harbor Historical Society is having the depot dismantled and transferred to a lot next to her house. She hopes to make it a railroad museum.

When Mrs. White received the bill of sale for the building, built in 1912, she was given 90 days to move the building or have ownership revert to the railroad company. For the first two years this gallant lady has been fighting the planned destruction of the building to make way for an expressway. It was largely through her efforts that the depot was declared a state historic site in July, 1972. ●

Sketch by Richard D. Brown

Quaint old station at Meaford, Ontario, Canada, has now been demolished.

New Publications

AMTRAK'S National Schedules **booklet is a must for your travel file. It includes hints on train travel as well as fare and services facts. For a free copy, send a stamped, self-addressed, business-sized envelope to Amtrak, Box K.F., 955 L'Enfant Plaza, Washington, D.C. 20024.**

We have just received a paperbound book of 65 large papers, illustrated, entitled Commuter Railroad Feasibility Study on Selected Lines in the Los Angeles Metropolitan Area. **It was prepared by Carl R. Englund, Jr., transportation consultant, for the Southern California Association of Governments, 1111 W. 6th Street, Los Angeles 90017, financed by a Federal grant. No price is mentioned. Presumably a free copy will be sent to any reader seriously interested in facts and figures on L.A. commuting.**

A typographical error in our February issue gave the wrong address for the well-edited and beautifully illustrated Passenger Train Journal, **which is really 29 E. Broad St., Hopewell, N.J. Price per copy $1.25, one year $5, two years $9, three years $13. In the near future we will write up PTJ's managing editor, Otto Janssen, as one of our** Interesting Railfans.

Rail Travel Newsletter, **a 20-page illustrated magazine published twice a month by Message Media, P.O. Box 9007, Berkeley, Calif. 94709, has gone up from 25¢ to 30¢ a month, or $7 a year. James Russell is editor, Paul Rayton editor-at-large. Each issue is packed with information on the passenger train business.**

Current info. on public transportation plus original research on mass rapid transit and related subjects are covered in the 12-page City and Suburban Travel, **a publication of the Transit Research Foundation of Los Angeles. Editor Bill Holden says it will be furnished free to newsmen on request, but for others the cost is $3 annually for 12 issues. Address Box 3542, Terminal Annex Station, Los Angeles, Calif. 90051.** ●

BOOKS of the RAILS

by GORTON T. H. WILBUR

***Amtrak Car Spotter, Including Auto-Train Cars*, (Revised second edition), edited by Robert J. Wayner, 78 pages, soft cover, 6x9", photos, rosters, Wayner Publications, Box 871, Ansonia Station, New York, N.Y. 10023, $4.95.**

Here is a good compact guide to the Amtrak and Auto-Train equipment as of Dec. 31, 1973, superseding Bob Wayner's first edition (May, '72). He lists Amtrak cars in numerical order of the new numbers already on the cars or assigned for future use. History of cars adds to this interesting reference work. Auto-Train listing is similar. Good pix help the spotters.

***Historic Southern Pacific Cars*, edited by Robert J. Wayner, 48 pages, soft cover, 8½x11", photos and captions, Wayner Publications, $4.95.**

Bob has put together a fine collection of photos from those of old duckbill-roofed coaches in the post-Civil War era to cars that rolled on the *Coast Daylight*. Fans are sure to like these pictures from the Smithsonian Institution and from private collections of Alan Styffe, Wilbur Whittaker, etc.

***That Man Haupt*, by James A. Ward, 278 pages, hard cover, 6¼x9¼", photos, text; Louisiana State University Press, Baton Rouge, La. 70803, $11.95.**

Rail and Civil War historians will enjoy this biography of the irrepressible Gen. Herman Haupt. Before becoming director of Union military railroad operations, he was a major figure in developing the Pennsy and rose high in the company's ranks. A short while prior to President Lincoln's beckoning finger for his services, Haupt spent time and money trying to bore the Hoosac Tunnel. He never recovered his Hoosac financial losses. In the post-war period he was successively chief engineer of the Shenandoah R.R., general manager of the Northern Pacific, and designer of the first long-distance crude-oil pipeline.

***Passengers No More*, by Gerald Daniels and L.A. Dench, 110 pages, hard cover, 7¼x9½", photos, index; Ian Allan Ltd., Terminal House, Shepperton, Middlesex TW17 8AS, England, £2.50.**

The first edition of this detailed reference work on Britain's closed stations and abandoned passenger lines was published as the Beeching regime's Reshaping Plan was just beginning. This second edition has been revised to include the whole program, with a historical record from 1919 to 1972. Of special interest is the coverage of rural depots on both narrow- and standard-gage routes. Among the many nostalgic pix is one showing Dartmoor station on the Moretonhampstead branch.

***Train Shed Cyclopedia No. 11: Caboose Cars 1879-1943*, 64 pages, soft cover, 8¼x11½", reprinted from original Car Builders Dictionaries and Cyclopedias, scale drawings, photos, text matter, specifications; Newton K. Gregg, P.O. Box 868, Novato, Calif. 94947, $3.95.**

***Train Shed Cyclopedia, No. 12: Tank Cars 1922-43*, 80 pages, soft cover, 8¼x11½", reprinted from original Car Builders Cyclopedia, scale drawings, photos, text matter, specifications. Newton K. Gregg, $4.50.**

***Train Shed Cyclopedia, No. 13: Buildings and Structures of American Railroads, 1893 (Part 2)*, 85 pages, soft cover, 8¼x11½", reprinted from original editions, scale drawings, text matter, specifications; Newton K. Gregg, $4.95.**

***Riding the Rails*, by Michael Mathews, 136 pages, hard cover, 8½x10¼", photos, text; Gambit, Inc., 53 Beacon St., Boston, Mass. 02108, $9.95.**

The railroad tramp, or hobo, has long had a colorful place in our imagination. Mathews, in superb and poignant pictures, has captured this almost-legendary way of life while it still exists. The earthy text and pix of boxcar scenes, rail yards, trains, hobo jungles, and close-ups of "knights of the road" form a vital chapter of this fast-disappearing part of American folklore. Mathews should know; he lived and photographed it. "Knights" provided the action. ●

Ralph Henson collection, 5413 Mosby Rd., Meridian, Miss. 37301

Union station in Meridian, Miss., on a rainy spring day in 1937. Areas now reduced to a small section on the far end. When this picture was taken some forty trains a day moved in and out of depot over four different railroads.

Periodicals and Journals

RAILROAD HISTORY NO. 129 of The Railway & Locomotive Historical Society (Autumn '73) is edited by John H. White, Jr.; 118 pages, 6x9", soft cover, photos, diagrams, maps, book reviews: published by R&LHS, Harvard Business School Boston, Mass. 02163; free for members (membership costs $5); nonmembers, $3. New Englanders especially will like E.D. Galvin's treatment of "The Canton Viaduct." Also worth reading: Fred C. Old's "Michigan's Iron Cobweb," "Napoleon's Captain Versus the Blue Ridge," by Bill Walden, Jr., and Brian Coleman's "Canadian National Employees Magazine." One thing, though, Jack: *Railroad Magazine* never was "devoted to fiction" in the sense you imply. Some good fiction, yes; but the magazine has always been more than well balanced with excellent fact articles.

PC RAILROADER, NOV.-DEC. '73, edited by Robert H. Reid, Box 179, East McKeesport, Pa. 15035, 36 pages, 8½11", soft cover, photos, rosters, map. Six times a year, $7.50. Bob turns out good issues for Pennsy and Penn Central fans.

CANADIAN RAIL, Canadian Railroad Historical Assn., edited by S.S. Worthen, P.O. Box 22, Station B, Montreal 110, Que., Canada, published monthly with articles, photos, rosters, maps, tts., diagrams, etc. Regular membership $12, associate $9, for 12 issues annually of this excellent magazine covering Canadian steam, diesel, electric, and even steamboats.

NICKEL PLATE ROAD MAGAZINE, FALL AND WINTER '73, Nickel Plate Historical & Technical Society, edited by Skip Sassmannshausen, P.O. Box 9254, Ft. Wayne, Ind. 46809; photos, diagrams, rosters, model interest; $6 for members. Back issues $1.25. George Berghoff has a nice piece on the versatile N-class in his "The Little Engine That Did."

THE RAILWAY MONOGRAPH, VOL. 2, NO. 2, 50 pages, 8½x11", photos, drawings, maps; Wm. F. Rapp, J-B Publishing Co., 430 Ivy Ave., Crete, Neb. 68333; $6 a year, issued quarterly; $2 single copy. Rapp's "Railroads of New Jersey" is particularly good reading.

RAILROAD STATION HISTORICAL SOCIETY MONOGRAPH NO. 4, edited by Rapp, 19 pages, 8½11", photos, diagrams, published at same address as above; $3 dues membership receives this mimeographed publication on depots old and new, six times a year.

BRASS POUNDERS GOSSIP, edited by Harwell E. West, published bi-monthly by Toledo Morse Telegraph Club, 102½ Rosalind Place, Toledo, Ohio 43610. For $3 membership dues you get this fine 8- to 10-page periodical with the flavor of old railroad boomer days of Morse, smoke, and steam.

THE RAILROAD EVANGELIST, published monthly by The Railroad Evangelistic Assn., $2.50 per year, $6.50 for three years. Subscriptions received by editor Herman Rose, 3117 N. Delaware St., Indianapolis, Ind. 46205.

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As a service to readers, we sell books at about 5 percent off publisher's price. Our discount applies to almost any English language railbook still in print if it retails at $3.50 or more. Allow from 4 to 6 weeks for delivery.

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The books are available only by mail. *Railroad Magazine Book Service*, 420 Lexington Ave., New York, N.Y. 10017. Here are a few suggestions:

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THE SWITCH LIST

All ads in this section cost 10¢ a word (minimum 25 words, no maximum wordage), including abbreviations, names, initials, numbers, cities, states, or provinces. Zip codes free. SSE means "enclose self-addressed stamped envelope." Send check or money order with each entry to Bill Balgley, advertising manager, Railroad Magazine, 420 Lexington Ave., New York, N.Y. 10017.

BUYING railroad collections and single items. I have been buying railroad, traction, and steamboat material for over 25 years and will gladly furnish bank and personal references. Arrangements can be made to pick up larger collections anywhere in the country. Single items and small accumulations are purchased through the mail. I will buy timetables, brochures, folders, switch keys, passes, guides, cap badges, booklets, posters, books, dining-car items, lanterns, wax sealers, calendars, signs, rule books, and other miscellaneous items.

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RAILROADIANA collectors, send large SSE (two 8¢ stmps) for giant lists of switch locks, keys, lanterns, cap badges, etc. I am also a cash buyer of railroadiana. Price and describe. —Neil Utberg, Box 420, Edinburg, Texas 78539.

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ORIGINAL Illinois Central R.R. steam negatives (616) for sale.—Gerald Carson, 11945 Gay Glen, Bridgeton, Mo. 63043.

WANTED: railroad tickets; will buy single tickets or collections: Must be in good condition; no ticket stubs.—John Martin, 1923 W. 11th St., Brooklyn, N.Y. 11223.

STEPHEN D. MAGUIRE, P.O. Box 51, Belmar, N.J. 07719, sells prints from his own collection of about 20,000 trolley and interurban negs. No list; state your wants. Enclose SSE.

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FOR SALE: Two thousand size 616 steam prints, various roads, mounted on paper at reasonable price. Write first.—D. Eldridge, 136 Grant St., Herndon, Va. 22070.

BOB GREENAWALT, 3643 Rosemead, Rosemead, Calif. 91770, wants old RR or mining stocks and bonds, Poor's and Moody's Manuals, pre-1920 Centennial dated brass "year" wheel.

ORIGINAL KODACHROME slides of freight cars and railroad heralds, 10 assorted $1. No list.—Norman Kohl, 51 Locust Ave., Glen Head, N.Y. 11545.

DENVER & RIO GRANDE WESTERN wall poster, 19x29", tricolor: orange lettering, blue sky, black border, $1.98 plus 50¢ postage and handling.—RR Posters, Box 6113, Denver, Colo. 80206.

PASSENGER-CARRYING TRAINS, 3½" to 24" gages. Steam, gas, new or used, custom-built. Set glossy photos, brochure, $2 (refundable).—"Trains," 130 County St., Seekonk, Mass. 02771.

I WANT anything on the Duluth, Winnipeg & Pacific or its predecessors like the Duluth Rainy Lake Winnipeg. Working on book. Also interested in KO&G, MV, CCA&A. Also pre-merger only CB&Q, C&S, FW&D, WV. Will buy or trade Burlington Lines steam and diesels negs., pub. and emp tts., passes. List completely what you have, and if you desire trade send SSE.—Jim Seacrest, 2101 Birchwood, North Platte, Neb. 69101.

FOLDING 116 camera fitted with f-47 lens and 400th second shutter, also 4x5 speed. Graphics and 116, 616 b&w and color film. Details, SSE.—Edward Hunt, 67 Storrs Ave., Braintree, Mass. 02184.

EARLY 1940's company and public timetables; pre- and WW II American Flyer track, cars, etc. 1960's HO-gauge cars, track, etc. Specify lists desired. Send 25¢ and SSE to T&B Sales, Box 1250, Vidor, Texas 77662.

1974 RAILROAD RELICS Price Guide, illustrated, over 800 items listed, $4. Diner silverware catalog reprint, samples. SSE and 25¢. Auction list 108, SSE.—Bartz, 11210 Lavender, Fountain Valley, Calif. 92708.

WAYNE WAGNER, 31 St. Dennis Dr., Apt. 319, Don Mills, Ont., Canada M3C 1G7, trades and sells original Kodachrome slides, 616 negatives of CN, CP; diesel, passenger, caboose, maintenance equipment. Lists available.

JAMES PALASEK, 34 Kulick St., Clifton, N.J. 07011, sells PRR, NYC, NYS&W timetables and other paper items. Also large hard-cover illustrated world travel books. SSE for list.

A NEW PUBLICATION, "No Performances Today," being a complete history of the Hagenbeck-Wallace circus train on the Michigan Central near Hammond, June 22, 1918, 86 killed, hundreds injured. 137 pages, over 100 photos. $4.50. Also have 10 copies of "Locomotive Fireman and Enginemen's Magazine," scattered copies of 1917, 1918, and 1920, $1.50 each.—Reeder's, 260 165th St., Hammond, Ind. 46324.

BROCHURE on Key System trains, Oakland, Calif., available, complete roster, photographs, maps and ferry boat section, from beginning to the end of service. $10 postpaid, Vernon J. Sapper, 1802 E. 23rd St., Oakland, Ca. 94606.

CHARLES CONNIFF, P.O. Box 9686, Jackson, Miss. 39206, sells original color slides, b&w prints, b&w negatives of stations, M, of W, equipment, cabooses, of many roads from coast to coast and Canada to Gulf. List free, SSE.

OFFICIAL RAILWAY GUIDE in recent form discontinued Dec. '73. Back issue my choice $2, or SSE for list, which includes railroad books, MR magazines, and R&LHS Bulletin.—T. Meredith, 1455 Cola Dr., McLean, Va. 22101.

EL, CNJ, RDG, PC, MILW, UP, MP, LHR, B&W and color photos. List for 5¢ and SE.—A.J. Tillotson, 3 Volger Dr., Park Ridge, N.J. 07656.

WANTED: Original or Kodak duplicates of New York Central diesels; will buy or trade. NYC pen pals also wanted.—Gary Sturm, RR. 3, Box 5, Elkhart, Ind. 46514.

ALBANY HUDSON "Fast Line" third rail uncovered, 1900-1929. 3 maps, 160 pictures, 124 pages, 8½x11", hard cover, $6.95; paperbound, $4.95.—Bill Gordon, 232 Beresford Rd., Rochester, N.Y. 14610.

RALPH COLEMAN, Box 6535, Portsmouth, Va. 23703, needs various issues of N&W Employee Magazine from '43, '44, '45, '48, '50, '53, and '59 to complete collection.

MONITOR your local railroads. New two-way radio pocket monitors. Professional features and specs. Flexible rubber antennas. Crystal controlled. SE for complete list.—D. Davidson, Box 635, Rutland, Vt. 05701.

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SPECIAL SALE: While the supply lasts; 12" LP steam recording and many action photos, "Berkshire In the Alleghenies," $3.35 each, postpaid. We are making room for our new albums.—Pilot to Tender Record Company, Garner, Iowa 50438.

C.J. KELLER, 60 Tuscano Ave., Revere, Mass. 02151, collects ICC accident reports and bulletins. Wants wreck photos of NY & New England RRs.

ADAM-WESTLAKE palace car ceiling lighting fixture. Double lamps, brass, copper. Patented May 6, 1890. Perfect condition. SSE for details. —L.E. Bryan, 1307 Spring Garden, Greensboro, N.C. 27403.

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TRADING 35mm color RR slides, your area for mine. Wants negatives of PRR, RDG, CNJ steam locos. Selling 22 railroad books, SSE for list.—Ernest Zehnder, 325 Lardner St., Philadelphia, Pa. 19111.

WILL BUY or trade for any material, pictures, negatives of Lehigh Valley railroad, East and Amboy Railroad, especially Amboy-Plainfield area. Want to hear from anyone knowledgeable on LV operations, including retirees.—J. Kovacs, 982 Spa Spring Rd., Perth Amboy, N.J. 08861.

BUYING, selling all kinds of railroadiana: timetables, Guides, brochures, all rail magazines. Send 8¢ stamp for lising of items for sale.—Dave Nestle, R.D. #2, Greenwich, N.Y. 12834.

ELVIN LIQUE, 1501½ 2nd St., Wausau, Wis. 54001, sells back issues of Railroad Magazine, Railway Progress, Official Guides, books. 10¢ plus SSE for list. Also emp. magazines.

RAILROADIANA AUCTION. Send SSE for listing. —John W. Yates, 125 E. Oakland Ave., Oaklyn, N.J. 08107.

HISTORICAL RAILROAD map of Nebraska, 153 companies, main lines, short lines, street, industrial, all present and abandoned lines, 29x46", rolled, $3.—Peter Cook, 1284 Hurst, Enid, Okla. 73701.

DIESEL SPOTTER'S GUIDE, first edition, in very good condition. Have one copy to sell, $6 postpaid.—Richard Paige, 715 Meridian St. Ext., Groton, Conn. 06340.

A SUPERPOWER PORTRAIT: 11x29" drawing of Pere Marquette Berkshire 1225. From ATS detector to crosshead nuts, no detail have been overlooked. On your wall for only $2. Proceeds go to help rebuild 1225 for excursion service. MSU Railroad Club, Museum, East Lansing, Mich. 48824.

EXCELLENT size 616 negatives for sale: diesels, electric, cabooses, equipment. Also color action slides; early diesel, steam photos. Specify interests. SSE.—Joe Quinn, Box 1044, Tillson, N.Y. 12486.

COMPLETE "Trains," bound by year. Bound 1908, 1935, 1940, and mint 1931 Guides. others. Send offers/list to Swiderski, 973 Schoel Dr., Decatur, Ga. 30033.

SELL: collections from 1935-'68, automatic pencils, board mounted, 33 railroads represented. Wooden lead pencils (unsharpened) collection, 100 different railroads.—Nethaway, 745 Highland, Salina, Kan. 67401.

WANTED: pictures of old GM Mack buses of MBTA Conn. Co., San Francisco Muni Ry. Also photos of MBTA Tremont class cars (3002-3021). Write with info to P.O. Box 57, New Haven, Conn. 06501.

SELLING COLLECTION of Official Guides 1951-'64; tts. and emp. tts., 1940's to '60's; other railroadiana. Large SSE for list.—Eugene Zank, 1414 Eastward, Alma, Mich. 48801.

SSE LARGE list: NYC diagrams, Cyclopedias, builder plates, china, timetables, etc. Trade or purchase builder plates, diagram books, NKP/WLE items.—John Benson, 4361 Clarkwood Parkway, 108, Warrensville Heights, Ohio 44128.

JANES WORLD RAILWAYS, 1954-'55 to 1968-'69 inclusive. Diesel railway traction, 1960-'63 inclusive. German railroad books. List sent on request.—P.G. Ellis, 3 Keiller St., Moorabbin, Victoria, Australia.

RAY WESTING, 15802 Third St., E., St. Petersburg, Fla. 33708, disposing of collection of steam loco photos, public and emp. tts., accident reports, Railroad Magazine and Trains. List for large SSE.

RAILROADIANA CLEARANCE, large assortment, including maps, books, timetables, brochures, many collector's items. 25¢ for all lists—D.M. Enterprises, Box 3, Medway, Mass. 02053.

STEAM NEGATIVES, sizes 620 to 5x7: NYC, B&O, UP, SP, DRGW, MILW, DNE, EBT, PDG, CNJ, Shays, GN, CBQ, Wabash, Penna., CNW, etc. Also a few steam color negs. SSE for list.—C.W. Jernstrom, 822 Pelham Dr., Ft. Wayne, Ind. 46825.

I HAVE LANTERNS, rulebooks, misc. RR items. Willing to trade for lanterns of other lines, oilers, or other railroad hardware.—R. Walsh, 220 Washington Ave., Rensselaer, N.Y. 12144.

WANTED: St. Louis Hannibal & Keokuk, St. Louis & Hannibal, St. Louis & Troy photos, negatives, timetables, rosters, passes, reports, rulebooks, etc.—Conrad Cheatham, 4 Midville Rd., Louisville, Ga. 30434.

INSTANT CALCULATIONS of rail speed via printed "Speed-o-Graph," 25¢.—Dan Yaeger, 1312 Beverly, St. Louis, Mo. 63122.

RAILROADIANA COLLECTORS and historians: keep in touch with one another and current happenings, such as reproductions and fakes, through membership in the Railroadiana Collectors Association at $6 a year. The quarterly "Express" with photos, articles and free ads, and the annual Directory," with listings by collecting interests, come with membership.—Dan Moss, Secretary, 405 Byron Ave., Mobile, Ala. 36609.

RAILROADIANA: over 450 interesting bulletins, booklets, books, and magazines, priced right; send SSE for list.—Mrs. Alfred G. Steigner, Ozawkie, Kan. 66070.

WANTED: 8x10 pictures of Erie steamer 2102, 2509, and 3700.—Andrew Monisera, Box 181, Sparrow Bush, N.Y. 12780.

SELL OR TRADE lanterns, keys. Possibly two for one for 5⅜ types I need. Excellent. Good chance for beginners.—C.R. Bulman, 45 Garden Parkway, Henrietta, N.Y. 14464.

HARE'S HISTORY of the Reading RR. for railfans, historians. 47 rare articles, dated 1909 to 1914, about the main line, Lebanon Valley branch, Perkiomen RR., Colebrookdale-Schuylkill Canal, over 25 others. 500-copy limited edition. 72 remaining. Free brochure. $14.50 postpaid, insured.—R.N. Mansley, 7722 Loretto Ave., Philadelphia, Pa 19111.

Mary Jane Phillips inspects Trona Ry. No. 50, one of the last three active Baldwin center-cabs in the U.S., at Espee shops in El Paso. No. 50 was in for minor repairs last August enroute to new owners Peabody Coal Co., in La.
Edward A. Leonard, 3500 Sun Bowl 24, El Paso, Texas 79902

CONEWAGO VALLEY MODEL RR. Club Flea Market & Auction, 206 Lincolnway West, New Oxford, Pa. 17350 (10 miles east of Gettysburg on U.S. 30), May 11, 1974 (rain date May 18, 1974). Flea Market 1-5 p.m., Auction 6-1 p.m. Flea Market table space $10 per table. Items of rr. or model rr. nature only. Write C.V.M.R.R. at above address for further info.

10 VERY OLD railroad uniform buttons, $9.00 bargain. B&O, also C&O railroad Adlake hand lantern, mint, colors red, blue, clear, yellow, each $20. 100 Golden Spike Stamps free with each order. Boxed set MoPac playing cards, $8.50. Boxed railroad pencils, $1.75—John Stone, 6810 Chambers Ave., Cleveland, Ohio 44105.

CANADIAN TROLLEY PHOTOS, 35 roads, hundreds of photos, some slides, send large SSE for list.—Frank Butts, 476 N. 5th Ave., Sturgeon Bay, Wis. 54235.

ROCK ISLAND FANS, join the Rock Island Technical Society, 208 N. Stewart St., Geneseo, Ill. 61254. $5 per year. A newsletter six times a year.

BALDWIN DIESEL operating instructions for switching locomotives, $3.50. Railroads on Parade, 1940 World's Fair, $1.50. 8 train wreck post cards. CN&StP, Cone Iowa, 1912, $1.—D.R. Doerres, Box 676, Wilton, Iowa 52778.

RAILROAD LITERATURE. Steam and Diesel Operation Maintenance Manuals. List free with five colored modern diesel picture postcards, $1.—Hobbys, 385 19th St., S.E., Cedar Rapids, Iowa 52403.

WANTED: Litchfield & Madison photos, builders' prints, rosters, maps, historical, technical, or any other data, etc.—Dan Cheragott, 3960A Britanny Circle, Bridgeton, Mo. 63044.

DISCOUNT PRINTING: passes, stationery, railroad forms, rubber stamps, full-color wall prints, etc. Quantities as low as 25 and 50. Many new railroad illustrations available. 50 envelopes only $3.99, 100 two-color passes only $5.99 postpaid. Illustrated 30-page catalog with samples $1.50 (refundable).—Discount Press, Box 237, Kensington, Md. 20795.

FOR SALE: lanterns, keys, silverware, locks, globes, lens, cap badges, glassware. Send 50¢ for lists, new one every month.—George Ballard, Box 41, Princeton, Ind. 47670.

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RAILROADIANA AUCTION: hardware, uniforms, magazines, photos, timetables, menus, semi-collectors HO and O gauge 15¢ for list.—Thomas Harper, 6066 Reinhart St., Philadelphia, Pa. 19142.

WANTED: 1911 Signal Dictionary, Eastern Steam Pictorial, Jersey Central Album, Southern Steam Power by Lowe and Rank, anything on old N.Y. Elevated lines, old books on railway bridges, old RR. Gazettes, and old Engineering News.—Jim Adams, 131 Ritson Rd., S., Oshawa, Ont., Canada L1H 5H4.

WANTED: copy movies, color, or b&w of British Columbia Electric Ry. streetcars, interurbans, or locomotives; any length.—R. Webster, 6711 Salisbury Ave., Burnaby, B.C., Canada V5E 2Z3.

SPORTING COLLECTOR constantly purchasing baseball and football, tomes, guides, world series programs, tickets, gum cards, and unusual mementos. Contact John Sullivan, 3748 N. Damen, Chicago 60618.

FOR SALE: plastic lens for switch targets, 5⅜" and 4½", smooth face, looks like the old glass type, $1 each, all colors, minimum order $5 plus 70¢ postage.—George Ballard, Box 41, Princeton, Ind. 47670. ●

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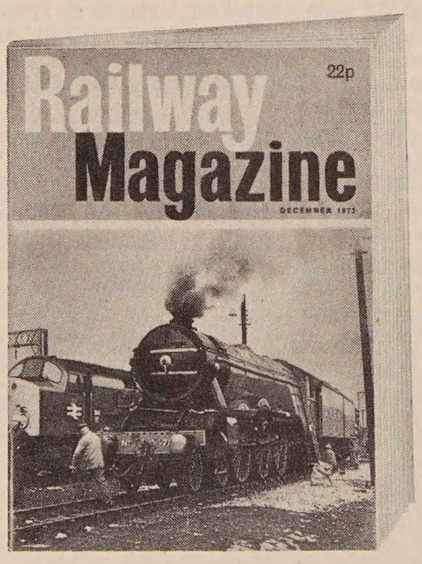


Coming Events

(No charge for listing in this section.)

March 30-31: 3rd annual Railroad Buffs Assn. wire n' rail convention, Philadelphia, Pa.; trackless and regular trolley trips, banquet. Robt. Epstein, trip chairman, 117-14 Union Turnpike, Key Gardens, N.Y. 11415.

April 6-7: railroadiana flea market, Mansfield Model RR. Club. Contact John R. Smith, 52½ N. Main St., Mansfield, Ohio 44902.

April 20: N.Y. Region, Nat. Assn. of Timetable Collectors, railroadiana bourse; rare postcards, magazines, books, rail hardware. Write R.E. Russell, 2737 Haven Ave., Ocean City, N.J. 08226.

April 20 and 21: Steam Rails to Rockets; two round trips, both days, Chattanooga to Huntsville, Ala., using ex-Southern steamer 4501. Package rate: adults $16.75, kids $13.50. Tennessee Valley RR Museum, Box 5263, Chattanooga, Tenn. 37406.

April 21: Metropolitan Phila. Ry. Assn. ride SEPTA lines to Norristown, Media, Sharon Hill behind Bullet 208, Brill 81. Discount if paid before April 13. Bob Gordon, MPRA trip committee, 816 South Ave., Apt. K4, Secane, Pa. 19018.

April 26-May 4: Railroad Enthusiasts tour, Boston to Zurich, by air; $389, incl. railtips. Unisphere Travel Ltd., 908 Providence Highway, Dedham, Mass. 02026.

April 27: annual reunion, New Haven RR. Tech. Info. Assn., Stonington, Conn. Write James Marr, Jr., 461 Main St., Niantic, Conn. 06357.

April 27: Clinchfield's One-Spot over scenic mt. route, thru 32 tunnels; adults $15.50, kids $12, incl. box lunch; Elkhorn, Ky., to Kingsport, Tenn., and return. Bluegrass Model RR. Club, 1821 Gettysburg Rd., Lexington, Ky. 40504.

April 28: doubleheader steam excur., Birmingham to Selma via Southern Ry. Heart of Dixie Chap., NRHS, P.O. Box 254, Birmingham, Ala. 35201.

April 28: SEPTA trolley trip, Red Arrow Div., Phila., many major lines; lv. 69th St. Terminal 1 p.m.; $5 adults, kids, $2.50. Contact Ernest Kovacs, 416 2nd Ave., Bethlehem, Pa. 18018.

May 3-5: Ry. & Loco. Historical Society annual meeting, N.Y. City. Trips, dinner, top industry speakers. Arnold Joseph, sec., N.Y. Chapter, Box 434, Grand Central Station, New York, N.Y. 10017.

May 3-5: Rail plant visits, flea market, model exhibits, etc. Inter-Rail '74, Lake Shore Ry. Hist. Society, P.O. Box 571, North East, Pa. 16428.

May 3: annual meeting European Train Enthusiasts; dinner, speaker. Eugene Volz, ETE, P.O. Box 1643, Sacramento, Calif. 95808.

May 5: doubleheader, ex-CPR 136 and 1057, over TH&B, vintage Credit Valley Ry. coaches, photo runbys, limited seating, adults $8, kids, $6. Ontario Rail Assn., Box 64, Brampton, Ont., Canada.

May 5-8: 65th annual meeting, American Ry. Development Assn., The Greenbrier, White Sulphur Springs, W. Va. Write S.T. McGowan, chairman, publicity committe, Chessie System, 10 Temple Bar Bldg., Cincinnati, Ohio 45202.

May 10-12: Steel City Niagara Frontier RR. convention, Hamilton, Ont., layout, tours, prototype action. Contact John Green, RR 1, Grimsby, Ont., Canada.

May 11-12: Steamtown Railfan Weekend. Locos 43, 82, 759 under steam; doubleheader special trains, night photography. $19.95 covers admission, rides. Contact Steamtown Foundation, P.O. Box 71, Bellows Falls, Vt. 05101.

May 16: annual dinner in Depot meeting, Mass. Bay RRE. Write Frank Kyper, P.O. Box 136, Ward Hill, Mass. 01830.

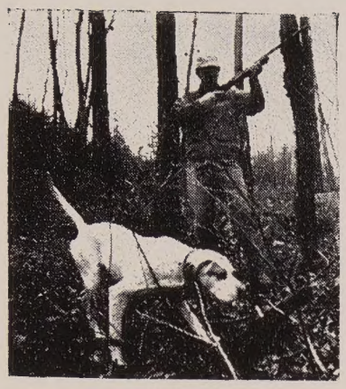
May 18-19: Jacksonville Chap., NRHS, other Fla. chapters, sponsor roundtrip Jacksonville to Valdosta, Ga., both days behind Southern 4501, photo run-bys. Adults $15, kids $11. Jacksonville Chap., NRHS, P.O. Box 8961, Jacksonville, Fla. 32211.

May 20-21: International Conference on Urban Transit, Pittsburgh. Write Jay A. Clark, 600 Grant St., Pittsburgh, Pa. 15219.

June 1: open house, Colo. Railroad Museum, Golden, Colo.; dinner, entertainment.

June 16-22: annual Michigan RR. Club trip to Maritime Provinces; 3 nights on train, from Windsor, Ont. $320, double occupancy. Contact Eugene Sussex, 19934 Pierson Ave., Detroit, Mich. 48219. ●

One of a continuing series. **Remington Reports**



Can a hunter learn anything from a skeet shooter?

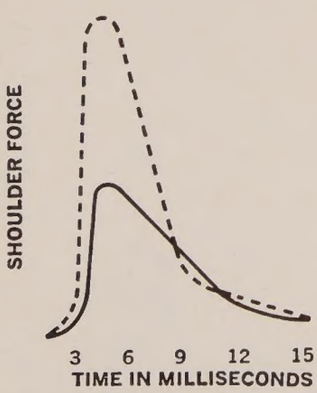
"Yes", say Remington experts . . . including why our Model 1100 Automatic Shotgun—the top gun in skeet—is tops in the field!

It's said some hunters don't shoot skeet because they can't eat clay pigeons. But, if you don't count taste and plumage, there is virtually no difference between a clay bird and a game bird. As far as a wing shooter is concerned, both are moving targets with the same problems of pointing, swing and lead.

If you go hunting with a skeet shooter, don't bet against him. Because skeet actually came from the field. It was developed about 50 years ago by the late Charles E. Davies, at Andover, Mass. He was an avid upland game hunter and wanted to practice shots he had missed while hunting. And don't forget that a dedicated skeet shooter may shoot at *thousands* of clay birds a year, each one simulating a game bird in flight. So it would take a really tricky bird to fool him. Naturally, like the hunter, the skeet shooter wants a shotgun that points naturally, patterns consistently and is reliable. That's why you'll find so many Model 1100's in the hands of so many skeet shooters, especially at championship events.

When you hold an 1100, you can tell it's different. The 1100 is designed with "muzzle preponderance"... balanced so there's weight at the muzzle. We believe this helps you hold an 1100 steadier than a shotgun without it. And we think it helps you point easier and faster and swing more smoothly, too.

Remington designers have given the 1100 a rate of fire they feel is optimum. Pull the trigger, and the 1100 ejects the empty hull and chambers a fresh shell automatically. You can fire again as soon as this cycle is complete. But, if the cycle takes too long, you may lose the chance for a quick second shot. And if the cycle is too fast, you're apt to shoot too soon... and miss. Remington's designers believe that the 1100's rate of fire is an ideal compromise between those two extremes.



The dotted line shows the recoil force from a typical fixed breech shotgun action (Shotgun weight: 7 lbs. 2 oz.). The solid line shows the recoil force delivered by a Model 1100 (Weight: 7 lbs. 12 oz.). Checked and proved by computer, the Model 1100 delivered 55% less force than the fixed breech gun. Each gun tested with a 12 ga. magnum load.

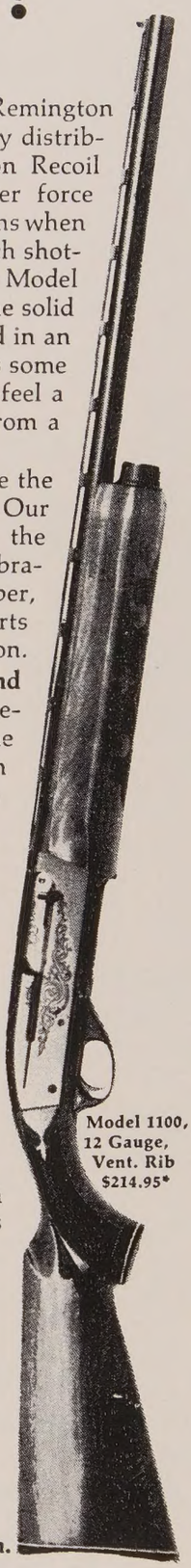
The 1100 really reduces recoil sensation. Remington has found a way to "soften" recoil sensation by distributing it. The chart shows how the Remington Recoil Reduction System works by plotting shoulder force against time. The dotted line shows what happens when a 12 gauge magnum load is fired in a fixed breech shotgun of approximately the same weight as the Model 1100. The recoil quickly rises to a high peak. The solid line shows the recoil when the same load is fired in an 1100. The line starts to rise but the system traps some of the recoil force, releasing it later. Thus you feel a "push" instead of the usual jolt you can get from a competitive gun.

If you like good-looking shotguns, you'll like the looks of an 1100. Those looks are functional, too. Our RK-W wood finish does more than dress up the stock. It's tough and scratch-resistant. Our "vibra-honing" metal finish not only permits a deeper, richer blueing...but it also makes the working parts smoother so there's more glide and less friction.

The Model 1100 comes in 12, 16, 20, 28 and 410 gauges. And there are optional interchangeable barrels within each gauge. In addition to the standard models, there are three-inch magnum 12 gauge, two lightweight 20 gauge models (one a magnum), deer models with rifle sights, and trap and skeet versions. Trap, skeet, and field left-hand models are also available. Prices start at $189.95*.

Use the shells we test the 1100 with. The champions do. Here's something else you can learn from skeet shooters: use Remington shells. Consistently, winners at the world skeet championships have depended on the top performance built into every Remington shotgun shell. Skeet shooters know their ammo as well as their shotguns.

Remington Reports are based on information direct from the men who design and engineer our products. If you'd like a free 1973 color catalog, send a postcard to: Remington Arms Company, Inc., Dept. 429, Bridgeport, Conn. 06602.



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